

**THE NON-ACADEMIC SELF-CONCEPT OF HOMOGENEOUSLY GROUPED
SIXTH THROUGH EIGHTH GRADE GIFTED AND TALENTED STUDENTS**

A Record of Study

By

HARLEIGH PAUL JONES

Submitted to the Office of Graduate and Professional Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Committee Chair,	Jean Madsen
Committee Members,	Beverly Irby
	Joyce Juntune
	Karen Smith
Head of Department,	Mario Torres

May 2018

Major Subject: Educational Administration

Copyright 2018 Harleigh Paul Jones

ABSTRACT

The purpose of this study was to analyze how the school-within-a-school setting interacts with the non-academic self-concept of gifted and talented students in grades 6-8. A case study approach was used to discover how grouping gifted and talented students in the school-within-a-school interacted with non-academic self-concept. The findings were analyzed based on the students' and parents' perceptions and experiences to understand how the school-within-a-school setting impacted the students' self-concept.

The findings show the grouping of gifted and talented students in a school-within-a school setting was positive for both students and parents. The students reported positive experiences during their two or three years of attending the specialized school-within-a-school. Students and parents reported that personal factors, including friends and academic opportunities, contributed to a positive experience. Students reported that behavioral factors, including academic performance and academic support, contributed to a positive self-concept. Additionally, students reported that being in a school-within-a school setting with other gifted students allowed them to create and develop positive relationships with age and intellectual peers within the specialized setting and the larger context of the entire school.

In order to increase the self-concept of students in the school-within-a-school setting, specific opportunities were developed for students to talk about giftedness and how they see themselves as gifted individuals. Resources for developing differentiated

learning experiences should be written into curriculum documents to allow teachers to develop multiple entry points for the varying readiness levels of the students.

Professional learning opportunities should also be utilized to help teachers share exemplars and experiences which may increase academic opportunities for students to have meaningful instructional experiences and increased non-academic and academic achievement for students.

ACKNOWLEDGEMENTS

I would like to thank my committee chairperson, Dr. Jean Madsen, for her guidance and support throughout my coursework and study. Her teaching has helped me develop as an educator and researcher. I would also like to thank my committee members, Dr. Beverly Irby, Dr. Karen Smith, and Dr. Joyce Juntune, for their support and feedback throughout my career at Texas A&M and throughout my study.

I would also like to thank Adam Hile and my other classmates in the 2010 EdD Cohort at Texas A&M. Because of this group I have learned what it means to be a true educator who is passionate about students and growing as a leader. Without our mutual support, this dissertation would not be possible.

Finally, I would like to thank my parents who fostered a love of learning in me at a young age. You always taught me to follow my dreams and that no goal was too large to accomplish.

CONTRIBUTORS AND FUNDING SOURCES

Contributors

This work was supervised by a dissertation committee consisting of Professor Jean Madsen, Committee Chairperson of the Department of Educational Administration and Human Resources Development, Professor Beverly Irby of the Department of Educational Administration and Human Resources Development, Professor Karen Smith of the Department of Educational Administration and Human Resources Development, and Professor Joyce Juntune of the Department of Educational Psychology.

All work for the dissertation was completed by the student.

Funding Sources

There are no outside funding contributions to acknowledge related to the research and compilation of this document.

TABLE OF CONTENTS

	Page
ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
CONTRIBUTORS AND FUNDING SOURCES.....	v
LIST OF TABLES	viii
CHAPTER I INTRODUCTION	1
Problem Statement	2
Research Objective.....	4
Research Questions	6
Significance of Study	7
Overview of the Methodology	8
Data Sources and Context	8
Data Collection.....	8
Data Analysis	9
Overview of the Theoretical Framework	10
Limitations of the Study	14
CHAPTER II REVIEW OF LITERATURE.....	16
Homogeneous Grouping	17
Heterogeneous Grouping.....	22
Self-Concept and Self-Efficacy	25
School-Within-a-School Programs	33
Programming Choice.....	39
Summary	43
CHAPTER III METHODOLOGY	46
Overview of the Methodology	46
Data Sources and Context	46
Data Collection.....	52
Data Analysis	53
CHAPTER IV FINDINGS.....	55

Background Information	55
Results	56
Environmental Perceptions	59
Positive Social Relationships	59
Knowledgeable Teachers	69
Task Value.....	72
High Challenge Level.....	73
Meaningful Content.....	78
Grades.....	79
Self-Efficacy.....	81
Personal Growth and Satisfaction	82
Summary	84
CHAPTER V CONCLUSIONS.....	90
Summary of Findings	90
Recommendations for Practice.....	92
Recommendations for Future Research	93
Conclusion.....	95
REFERENCES.....	97

LIST OF TABLES

	Page
Table 1 Demographic Characteristics of Selected Student Participants	49
Table 2 Demographic Characteristics of Selected Parent Participants	49
Table 3 Themes and Subthemes Utilized for Data Analysis.....	58

CHAPTER I

INTRODUCTION

Since the late 1980s, the school-within-a-school model has been an organizational construct to improve education in large urban school districts. This organizational construct maintains the benefits of the larger school while creating specialized learning communities. The intent of this study is to examine the non-academic self-concepts of gifted and talented students in grades 6-8 in a school-within-a-school/homogeneous setting.

Grouping gifted students according to cognitive ability is common practice in gifted education. The questions of when and how to group students according to cognitive abilities are difficult and often frustrating challenges for educators (Allan, 1991). The literature regarding ability grouping provides findings of the effects of grouping on student achievement. Slavin (1986) reported that some forms of grouping improved the academic performance of gifted students. In 1990, Slavin discussed the “lack of positive evidence for grouping students in his study... the standardized tests used are too insensitive to pick up effects of grouping.” With this concern regarding the use of achievement test scores as a measurement of the effects of grouping on student achievement, what measure could be used that would be reliable?

Heterogeneous and homogeneous grouping of gifted students is frequently and intensely debated. Heterogeneous grouping for all students is supported by some research due to an appeal and a desire to eliminate grouping that may appear elitist or

foster elitism (Kulik and Kulik, 1982). There is research to support homogenous grouping for gifted students because this grouping prepares students for productive contributions to society (Fetterman, 1988). Shields (1996) designed a study to compare the effects of homogeneous and heterogeneous classroom placements on school experiences, attitudes and perceptions of gifted and talented 5th graders. Shields's study addressed other issues to advance the research of the effects of heterogeneous and homogeneous grouping beyond information provided by standardized achievement tests. The empirical data found in Shields's study demonstrated that homogeneously grouping gifted students is a valid form of organizing and programming for gifted students (Shields, 1996).

Problem Statement

Grouping practices have been scrutinized for many years because of the perceptions of elitism and possible damage to students' self-concept and self-efficacy (Shields, 2002). Self-concept is one of many terms used interchangeably with self-esteem and self-efficacy (Marsh & Craven, 2006).

Elitism can be defined as giving preference to some group based on a misconception of superiority (Fielder, Lang & Winebrenner, 1993). The perception of elitism has been perpetuated because of the ability of a child to function at an intellectually advanced level; therefore, making that child better than other children (Fielder, Lang & Winebrenner, 1993). Having an advanced intellectual level implies that an educational need is present (Fielder, Lang & Winebrenner, 1993). Too often, this educational need is viewed as giving this child an unfair advantage (Fielder, Lang &

Winebrenner, 1993). When students are identified with having an advanced intellectual ability, schools are faced with providing services for these children. The decision to group these students together, or to place them in different classrooms throughout the school fosters and perpetuates the misperception that ability grouping is elitist (Fiedler, Lang & Winebrenner, 1993).

A major criticism of homogeneous grouping is that it will lower the self-esteem of students in low-ability groups because they will not be challenged to learn at higher academic levels and have no high-ability peers after whom to model their academic and non-academic behaviors (Marsh & Parker, 1984). However, low-ability students may experience success when grouped with like-ability students and high-ability students may face greater competition for the first time being grouped with like-ability students. Gifted students often suffer an early drop in self-concept and self-efficacy due to the presence of other high-ability students in their group and a challenging curriculum that they have not had to face in the past (Marsh & Craven, 2006). The perfectionist qualities of gifted students often take over here as they work hard to ensure that they meet the higher expectation of their teachers (Rinn, Plucker, & Stocking, 2010). This drop in self-concept and self-efficacy is short-lived as gifted students become accustomed to higher-level curriculum challenges and working with other gifted students (Rinn, Plucker, & Stocking, 2010). For the purpose of this case study, student-teacher interaction was examined to explore how the teacher's content knowledge and the delivery of content influenced student self-efficacy/self-concept. Additionally, parent perceptions of the GT Academy were also examined to determine if their decision to

send their children to the GT Academy was the best choice both academically and socially for their children.

Research Objective

Self-efficacy has been shown to be affected by ability grouping of students (Feldhusen, 1989). Feldhusen (1989) found that watching someone of similar ability succeed raises another person's feelings of efficacy and motivates them to attempt a task. Additionally, students gain the most from watching the person of like ability "cope" with the task rather than watching someone who, prior to beginning the task, has mastery-level skills (Hoge & Renzulli, 1993). Gifted students in both homogeneous and heterogeneous groups benefit from working with like-ability peers because they can learn from each other how to stay on task and work on a task until it is accomplished (Hoge & Renzulli, 1993). Because gifted curriculum materials allow students to work creatively or in open-ended assignments, gifted students push each other past the expectations of the teacher and healthy competition allows them to believe more in their own abilities as they watch their peers succeed in different, more highly cognitive ways (Van Tassel-Baska, 1986).

Gifted students see themselves as complex, multifaceted individuals and educators should recognize and support gifted students in either, a homogeneous or a heterogeneous environment (Rinn, Plucker & Stocking, 2010). Adults' attitudes about grouping affect students and their achievement in ability-grouped classes as well (Rinn, Plucker, & Stocking, 2010). Teachers who perceive gifted students as role models for other students in a heterogeneous class tend to "use" gifted students as tutors and

assistants for other student groups (Schunk, 1987). This can have mixed effects on gifted students as they either feel added self-concept due to their additional responsibilities or feel a lowered self-concept as they continue to work with students on lower-ability tasks rather than being challenged at their learning level (Rogers, 1991). The impact of a certain instructional situation on academic self-concept may be influenced by perceived competence of peers (Rinn, Plucker & Stocking, 2010).

Typically, children model their behavior after the behavior of like-ability children whether they are in homogeneous or heterogeneous groups. Kulik and Kulik (1982) found that the effects of grouping on self-esteem were very small and dependent upon program type. Programs for gifted students have trivial effects on self-esteem (Kulik, 1985). When gifted students are grouped together for a majority of the instructional day, this is most likely the first time that they encounter competition within the classroom. Some gifted students thrive in a competitive classroom; however, for some gifted students, a competitive classroom can foster social comparisons and relationships that may lower self-concept (Rinn, Plucker & Stocking, 2010). The competition faced by gifted students initially causes self-esteem to drop, but as students adjust and model their academic thinking and behaviors after their like-ability peers, the self-esteem of students adjusts back to previous levels (Rinn, Plucker & Stocking, 2010). Tomlinson (1999) recommends that gifted students need to have varied instructional situations that promote a positive self-concept. For example, gifted students should have the opportunity to participate in cooperative groups, individualistic competitions and

traditional competitions in which they compete against his or her intellectual and age peers (Rinn, Plucker & Stocking, 2010).

Labeling students according to ability may have some impact on self-esteem because labels attach either positive or negative expectations upon students. The impact of the labeling may be overshadowed by the effect of the comparison that the student makes between himself and others each day in the classroom (Kulik, 1985). Students' attitudes toward certain academic subjects are improved by grouping; however, Allan (1991) found that grouping was shown to have no effect on gifted students' attitudes toward school in general.

Research Questions

To understand the effectiveness of current grouping practices of gifted and talented students in grades 6-8, it is necessary to understand how grouping of gifted students impacts their non-academic self-efficacy. Therefore, the research questions for the present study were designed to shed light on grouping practices and the impact of these grouping practices on the non-academic self-efficacy of gifted students in grades 6-8.

1. How do grouping practices of gifted students impact the non-academic self-efficacy of students in homogeneous and heterogeneous settings?
2. When school administrators apply grouping strategies for gifted students, do the students' experiences mirror the findings of the research on grouping related to a gifted student's non-academic self-concept/self-efficacy?

A better understanding of how grouping strategies, in particular homogeneous grouping, may provide greater insight into how gifted students feel about being grouped with their intellectual peers on a daily basis and help school administrators understand what gifted students truly experience beyond academic achievement.

Significance of Study

There is a considerable amount of research on grouping of gifted students as it relates to academic achievement. Ability grouping for specific curriculum area produces substantial academic gain in achievement, improves general attitude towards school and enhances self-efficacy in specific domains (Rogers 2001, Kulik 1992, Kulik & Kulik, 1991, 1992). Zimmeran & Martinez-Pons (1990) examined the academic self-efficacy of gifted students and found that a student's giftedness was associated with high levels of academic efficacy. Additionally, Zimmerman and Martinez-Pons found that gifted students acquired academic self-confidence because the students attended a separate school with special academic programming (1990). However, Banfield (2005) found that ability grouping caused a decline in global self-concept and self-esteem in students of average ability and among gifted students, global self-concept and self-esteem remained higher. Mixed findings have been reported related to self-concept and self-efficacy. Many of the findings are related to academic self-efficacy and are quantitative in nature. This study was conducted to examine the non-academic self-efficacy of gifted and talented students in grades 6th through 8th in a homogenous setting. The influence of grouping gifted middle school students homogenously in a specialized setting has not been empirically examined. I am attempting to provide educators and

parents with greater insight to the self-concept of gifted 6th through 8th grade student beyond academic achievement.

Overview of the Methodology

This qualitative study uses the case study research strategy with structured interviews and observations to collect data. Data from the structured interviews, observations, field notes and a reflexive journal will be collected over one academic semester.

Data Sources and Context

The study took place in a large suburban middle school with approximately 1200 students. This school was selected because of its racial and socio-economic diversity and its school-within-a-school structure. Purposeful sampling was used to select participants for the study to maximize differences of participants at the beginning of the study to increase the likelihood of varied findings or perspectives at the end of the study (Creswell, 2007). The participants selected varied in gender, age, racial and socio-economic make up to provide rich data that will allow for an in-depth study of non-academic self-concept of homogeneously gifted students in grades 6-8 in a school-within-a-school setting. Participants included six gifted and talented students enrolled in a gifted and talented school-within-a school program in grades 6-8 and six parents who had a gifted and talented student enrolled in the gifted and talented school-within-a school program.

Data Collection

This qualitative study used several strategies for data collection including interviews, observations and field notes (Merriam, 1988). Semi-structured interviews

were the primary strategy used to collect data. The researchers conducted a one hour long, open-ended interview with each participant in the study. A series of pre-established questions were used for the interviews (Erlandson, 1993). The interviews were conducted using questions regarding demographic data and questions related to self-concept/self-efficacy to provide a thick description of the participants' perceptions. The interviews were taped and transcribed for recurring themes. Protocols for recording information were developed to store data from the interviews and field notes (Creswell, 2007).

Observations of participants also took place in the students' classrooms and areas of the school, such as the cafeteria, to establish an insider identity; gain entrée, and to acquire a better understanding of how students interact with other students (Creswell, 2007). The data was collected over one academic semester with interviews took place one month after the academic year begins and again approximately two weeks before the conclusion of the academic semester. This allowed for maximum exposure to the school-within-a-school experience.

Data Analysis

Responses from the interviews were transcribed and analyzed using coding and thematic analysis focused on describing how the students' non-academic self-concept developed and possibly how it, may or may not have, changed throughout the academic year. Field notes were analyzed to find recurring themes, in addition to, commonalities within the themes that emerged from the interviews and observations. This allowed the

researcher to identify common experiences of the students and parents. Additionally, the methodology facilitated the process of identifying themes in the data.

To establish the reliability for the study, the process of triangulation, analyzing both the responses from the interviews and the field notes from the observations, allowed each source to validate the data (Denzin & Lincoln, 1998). The transcripts from the interviews were given to the participants to give them opportunity to correct errors of facts, volunteer additional information through member checking (Denzin & Lincoln, 1998).

Codes used from prior research and the findings were used to identify themes and to develop a coding process (Boyatzis, 1998). Using Bandura's social cognitive theory provided multiple perspectives to code the data collected from interviews and observations.

Overview of the Theoretical Framework

This study will be grounded in the social cognitive theory from Bandura (1997). Bandura's social cognitive theory encompasses self-efficacy and self-concept. Self-efficacy is a person's belief in his or her ability to succeed in a particular situation. Self-concept includes the composite of ideas and feelings that a person has about his or her own identity, worth, capabilities, and limitations. A strong sense of efficacy through mastery experiences can be undermined if failure occurs before a sense of efficacy is established (Bandura, 2007). Applying Bandura's theory, if a gifted student experiences this failure among his or her intellectual peers, what is his/her motivation to continue within a homogeneous context? Additionally, Bandura (2007) states that when people

doubt their capabilities they shy away from difficult tasks they view as a threat. By dwelling on their deficiencies rather than focusing on how to overcome their deficiencies, they experience stress and possibly depression (Bandura, 2007). Therefore, Bandura's theory will provide a framework to examine the non-academic self-concept of homogeneously grouped gifted and talented students in a school-within-a-school program in grades 6-8. This study will examine grouping strategies for gifted and talented students and how grouping affects their self-concept and self-efficacy.

Bandura (1994) defines self-efficacy as a person's beliefs about their capabilities to produce academically and in other performance situations. Self-efficacy has been linked to achievement, as students who believe they possess the skills necessary to succeed are more likely to attempt tasks at higher cognitive levels and work until they have achieved at those higher levels (Plucker & Stocking, 2001). Gifted students specifically experience an increase in self-efficacy because of an increased self-awareness and tendency towards perfectionism (Kulik & Kulik, 1982). Homogeneous grouping affects self-efficacy because students who are constantly challenged in a high ability group will continue to challenge themselves if they feel they are capable of the work, or give up if they feel they are not capable (Kulik & Kulik, 1989). Heterogeneous grouping affects self-efficacy of gifted students because students in mixed-ability groups are often not challenged at their learning level and so feel a false sense of self-efficacy due to the constant achievement at lower-level tasks (Kulik & Kulik, 1989).

Research on the effects of grouping on self-concept and self-efficacy is varied. Kulik (1985) found that grouping has minor effects regarding attitude and self-concept.

Students who were homogeneously grouped by academic ability had a better attitude toward learning due to the opportunities to learn higher-level, challenging tasks. Kulik (1985) also found however, that being grouped by ability did not change general attitudes about school. That is the ability grouping did little to affect the students' social interactions and feelings towards students in non-core content classes that may or may not be gifted.

Schunk (1996) defines self-concept as one's collective self-perceptions that are formed through experiences with others and the environment. Students, through different experiences, develop either a positive or negative self-concept of themselves. Marsh and Craven (2006) state that the construct of self-concept is built upon internal and external comparisons. For example, a gifted student's self-concept can be constructed through the comparison of their academic ability in math or language arts. Likewise, a gifted student's self-concept can also be constructed through the comparison of their own abilities to the perceptions they have of other students' abilities (Marsh & Craven, 2006). That is, through the perceptions of one's ability and the comparison internally or externally, a student will construct his/her own self-concept (Plucker & Stocking, 2001).

Gifted students specifically have a need for instruction aligned to their self-concept needs because of the tendency of gifted students to have heightened social and emotional feelings (Rinn, Plucker & Stocking, 2010). Homogeneous grouping may affect students' self-concept because gifted students, who used to be the highest achieving students in their classroom, are now grouped with other students who achieve

at the same advanced level. Olszewski-Kubilius and Turner (2002) found that there is a link between academic achievement and self-concept among gifted students. They found that gifted students' perceptions of their academic abilities also had a strong positive relationship to their academic performance. When gifted students are put in homogeneous, or self-contained classrooms or programs, gifted students experienced a more competent peer group than they might have experienced in a heterogeneous or regular classroom (Olszewski-Kubilius & Turner, 2002). This can be exciting for many gifted students, as well as, overwhelming and possibly detrimental. Being with competent peers can be exciting because a peer group with comparable intelligence may validate one's identity and reinforce talents and interests. Simultaneously, this can be detrimental, because individuals, who have had experience of being at the "top" of the class and have enjoyed that status, are no longer at the "top". The realization that there could be individuals who are just as, or even smarter than they are, can have a detrimental effect (Rinn, Plucker & Stocking, 2010).

In contrast, not all gifted students are negatively influenced in their academic self-concept by ability grouping (Preckel & Brull, 2008). Heterogeneous grouping affects gifted students because they are often the most high-achieving students in the classroom and either do better than their peers on a regular basis, or are not challenged because they are given the same academic tasks as their lower-achieving classmates (Huss, 2006). Heterogeneous grouping typically fails to inspire or advance most gifted students, leaving them bored, frustrated, and even anxious (Huss, 2006). In a study by Adams-Byers, Whitsell, and Moon (2004) found that gifted students achieve at a higher

rate than their non-gifted peers in a heterogeneous classroom, gifted students expressed that the heterogeneous classroom created a negative environment in which gifted students were not appreciated by their classroom teacher or their non-gifted peers. Coleman and Gallagher (1995) reported that gifted students felt annoyed when non-gifted peers asked them for answers in a heterogeneous classroom. Additionally, these authors found that their non-gifted peers and teachers perceived gifted students as being too smart or pushy, or when their grades suffered because of the lack of effort from non-gifted peers in cooperative learning groupings, it angered the gifted students (Coleman & Gallagher, 1995). Rinn, Plucker and Stocking (2010) have found little credible evidence that praise and a lower level of challenge provide a lasting change in a student's intellectual achievement. However, these authors also note that challenge may have a short-term, negative effect on self-concept, but a long-term positive effect as confidence increases over time.

Limitations of the Study

There are limitations to the present study. First, data was collected from only one school. This school is located in a suburban area that draws from a student population from various economic backgrounds; however, a majority of these students who attend the GT Academy are from families from the higher socio-economic area of the school district. Therefore, the data sample is not a true representation of the entire district and limits the ability to generalize the findings of the study.

Second, the case study of students and parents was limited only to the academic content area courses taken within the GT Academy. There are other course the students

participate in and should be considered. However, limiting the focus to the academic content areas was the best option for this case study approach.

CHAPTER II

REVIEW OF LITERATURE

The intent of this study was to examine the non-academic self-concepts of gifted and talented students in grades 6-8 in a school-within-a-school/homogeneous setting. The environment, in this case how students are grouped, impacts a student's self-concept (Bandura, 1986). Educational researches have examined various grouping practices for gifted students (Feldhusen, 1989; Schunk, 2008; Van Tassel-Baska, 2010).

Students in gifted and talented programs have specific academic and social needs that must be addressed by the classroom teacher. Teachers of gifted students work to address these specific needs by grouping students in different ways. Whether or not to separate gifted students out of the regular education classroom to educate them in homogeneous groups has been debated for many years as it has implications in both academic and social areas.

The research on the effects of grouping gifted students centered on homogeneous, heterogeneous, and ability grouping strategies is varied. Each of the strategies had positive and negative effects on the academic and social needs of gifted students. One grouping strategy that has been used for gifted programs is a school-within-a-school model that had the goal of including the positive attributes of homogeneous and heterogeneous grouping. One of the major concerns is that full-time ability grouping has possible negative impacts on students' self-concept (Vogl & Preckel, 2014).

The goal of this literature review is to provide a theoretical foundation for the study on homogeneous and heterogeneous grouping and to examine the positive and negative effects of each grouping strategy as it relates to both academic and social aspects of student self-concept. Therefore, Bandura's theory will provide a framework to examine the non-academic self-concept of homogeneously grouped gifted and talented students in a school-within-a-school program in grades 6-8.

The identification of gifted students and their placement in different programs will also be examined. Finally, the option of school-within-a-school programming will be explored to determine how researchers view this option to meet some of the academic and social-emotional needs of gifted students.

Homogeneous Grouping

Homogeneous grouping is the placement of students of like abilities in one classroom. Typically, homogeneously grouped students have a small range of abilities in the classroom, whereas, the range is larger in a heterogeneous classroom.

Homogeneous grouping of gifted students is the practice of separating gifted students from the regular education program and allowing them to work in classrooms or schools with other gifted students (Rogers, 2002). This grouping strategy can be achieved in many ways depending on the school size, setup, and budget. One option is for schools to have a separate gifted classroom within the same school where gifted students are together for their core content instruction, but in this model the gifted students are then allowed to attend elective classes and lunch/recess with students who are not identified as gifted. A second option is for students to be removed from their regular school to

attend a magnet school with other gifted students. In this model gifted students are homogenously grouped not only during core content instruction, but also in electives and lunch/recess.

Proponents of homogenous grouping point to research that shows gifted and high-ability students show positive academic effects from homogeneous grouping (Rogers, 2002). Shields (2002) also found that grouping gifted students homogeneously had a significant, positive effect on gifted students' academic achievement, attitudes related to themselves as learners, and their experiences at school. The positive academic effects of grouping gifted students in a homogenous manner result from acceleration or classes that are designed specifically for gifted students (Allan, 1991). Because students are grouped with other gifted students, it is likely that all the students in the class are academically able to succeed in classes that are designed to be above-grade level or designed to meet the specific strengths of gifted students such as creativity and independent research skills. The homogenous grouping means that teachers of these classes can create lesson plans that broadens and deepens the curriculum to meet the specific needs of gifted students (Holloway, 2003). In order to meet these needs, teachers of the gifted must be trained to meet the specific needs of gifted students in the areas of advanced academics, creativity, and research. Barns and Mason (2002) found that students in homogeneous classrooms received better instruction from highly motivated and better qualified teachers who created a challenging learning environment. While having well trained teachers is important for the instruction of gifted students, gifted students have expressed the importance of being with other gifted students during

the instructional day. Adams-Byers, Whitesell and Moon (2004) found that gifted students prefer the company of their intellectual peers and did not mention a need for time with non-gifted friends. This finding supports what research and educators have asserted that gifted students benefit from time with their intellectual peers who share similar abilities and accept each other for who they are (Adams-Byers, Whitesell & Moon, 2004). Additionally, gifted students should be given the opportunity to work with students who have similar interests and ability levels to that gifted students are able to reach their potential (Clinkenbeard, 2012).

As teachers work with gifted students in homogenous grouping situations, they are able to take time to address different skills in accelerated classes (Tomlinson, 1999). Research by Rogers (1991) supports homogenous grouping for gifted students because this grouping prepares students for productive contributions to society. Students in homogeneously grouped classes are more likely to conduct independent research or complete projects that allow the students to use real-world data collection and professionals outside of the school to assist with their work (Tomlinson, 1999). Both of these advanced skills allow students to apply their academic work in new ways and prepare the students for productive contributions to society (Tomlinson, 1999). These types of instructional strategies are possible in the regular classroom, but often require more time and differentiated grouping than the regular education classroom teacher is able to provide (Tomlinson, 1999).

The process of grouping gifted students homogeneously typically depends on their cognitive ability or intelligence quotient reported on standardized tests (Rogers,

2002). To be identified as a gifted student, intelligence testing must show an advanced level of performance (Rogers, 2002). Once students are grouped homogeneously, students' achievement is typically measured by norm-referenced achievement tests (Rogers, 2002). However, the scores of gifted students usually approach the ceiling, the highest scores attainable on standardized achievement test, making it difficult to show significant academic improvement (Allan, 1991). Because students in homogenous classrooms or schools are grouped together with other students who have advanced achievements on the tests, there are little differences between their achievement scores (Allan, 1991). Due to these reasons, it is difficult to prove any significant gains in achievement from homogeneously grouped students because there is such little room for growth (Holloway, 2003).

From the research conducted by Holloway (2003), he found that researchers debate whether to use standardized tests or teacher-made assessments to obtain a true picture of a student's achievement gains in a homogeneous classroom. Teacher assessments often allow for performance assessment as a qualitative measure in addition to traditional quantitative achievement tests (Tomlinson, 1995). Fiedler, Lang and Winebrenner (1993) state that grade-level achievement does not accurately reveal growth for students who perform at or above the top percentile ranks because they experience the ceiling effect. Out-of-level testing, where students are assessed using tests designed for older students, is another possible solution to obtain a clearer picture of a student's gains in achievement (Kulik, 1985). Kulik and Kulik (1989) found that gifted students grouped together performed significantly better than they did in

heterogeneous classes. This might stem from the teacher being able to meet the needs of gifted students better in a homogeneous environment. Ability grouping was found to have important social, emotional, and academic consequences for students (Worthy, 2010). Learning and achievement were positively affected by instructional contexts that included substantive versus procedural engagement, more reading and writing in connected text, more choice and coherence, and more student participation (Worthy, 2010). Gifted and high-ability students show positive academic effects from some forms of homogeneous grouping (Allan, 1991). The strongest academic effects for the grouping of gifted students result from acceleration or classes that are specially designed for the gifted and have specially developed differentiated curriculum, and teachers trained that understand the nature and need of the gifted (Allan, 1991).

Opposition to homogeneous grouping focuses on the self-esteem of students and the exclusion of students of color and students living in poverty (Oakes, 1985). Fiedler, Lang and Winebrenner (1993) recognized that for many years the assessment process for gifted services did result in the underrepresentation of students of color and students living in poverty. The authors assert that widespread changes have been made to overcome the inequities of relying on standardized test data (Fiedler, Lang & Winebrenner, 1993).

The self-esteem of students in homogeneous classrooms was found to be lower than their age peers in heterogeneous classrooms because of the small range of ability levels and the academic competitiveness within the homogeneous classroom (Melser, 1999). Adams-Byers, Whitsell, and Moon (2004) found that gifted students in

homogeneous classrooms expressed concern about the range of abilities in that setting. Students studied feared that they would be at the low end of the range of abilities in a homogeneous setting. In contrast, opponents to homogeneous grouping argue that there is a difference in the morale of teachers and a greater number of non-European Americans and economically disadvantaged students in lower track or heterogeneous classes (Oakes, 1985). Oakes (1985) also argues that students in homogeneous classrooms do not have opportunities to appreciate the diversity within the school by being grouped with students like themselves.

Heterogeneous Grouping

Heterogeneous grouping is the distributing of students of varying abilities of a grade level within a school (Rogers, 2002). Students are placed in different classrooms to create an even distribution of varied student abilities (Rogers, 2002). Heterogeneous grouping is the practice of servicing students identified as gifted within their regular education classroom or scattering gifted students throughout the various classrooms in the school (Rogers, 2002). In this grouping strategy, gifted students are part of a group of individuals with a larger range of abilities. Tomlinson (1995) states that if gifted students are to be educated in heterogeneous classrooms, it is imperative that gifted students are provided with academic challenge. It is the job of the classroom teacher to differentiate within the classroom, modifying the content, process, or product of instruction to meet the specific needs of gifted students (Tomlinson, 1995).

Advocates for heterogeneous grouping argue that backgrounds and experiences of all students are important for enriching learning in the classroom (Huss, 2006). The

practice of heterogeneous grouping for all students is supported by research that shows a desire to eliminate grouping that may appear elitist or foster elitism (Kulik & Kulik, 1982). However, little evidence supports the claim that grouping by ability produces higher achievement than heterogeneous grouping (Gamoran, 1992). Because separating gifted students out of the regular classroom often results in gifted students receiving different resources, including modified instructional materials, creating smaller class sizes, or additional time in core content classes, there is a general feeling that the gifted students are provided with a more elite education (Gamoran, 1992). Many school systems promote heterogeneous grouping for all students because it levels the playing field in core content classrooms following traditional methods of presenting curriculum at the same pace, pedagogy, and materials for the entire class (Gamoran, 1992).

There are grouping practices within heterogeneous grouping that schools utilize to serve both gifted and non-gifted students. Whole group instruction is the most widely used practice of heterogeneous grouping because more students can be educated within a graded classroom in which the teacher prepares one lesson based on a single ability (Goodlad, 1984). This approach makes preparation for the teacher easy; however, it does not address the various ability levels of the students in the classroom (Tomlinson, 1995). While this grouping approach makes preparation for the teacher easier, gifted students in this setting have expressed a preference for this grouping arrangement because of the ease of attaining a high class rank with little effort or work (Adams-Byers, Whitsell & Moon, 2004). Adams-Byers, Whitsell, and Moon (2004) also found that gifted students in heterogeneous settings felt less stress, as well as, had a concern

regarding low challenge, slow pace, and repetition of content resulting in boredom. This finding can be seen as troubling for gifted and talented educators. This finding emphasizes the point of having highly trained teachers in heterogeneous classrooms where gifted and talented students receive their services on a daily basis.

Within-class ability grouping in a heterogeneous classroom provides teachers the opportunity to meet the needs of the various ability levels by differentiating for readiness and achievement levels within the heterogeneous class (Holloway, 2003). In this grouping situation, the teacher presents a lesson to the whole class and then places the students into smaller groups for specific activities based on readiness, interest, or demonstrated performance (Renzulli, 1994). This practice of differentiation based on student abilities within the heterogeneous classroom provides students with the opportunity to engage in learning that meets their specific needs while eliminating the elitist practices of separating the students out of the general education classroom (Holloway, 2003).

Although within-class grouping is more difficult to accomplish than whole-group instruction because of time in planning and grouping, substantial positive academic effects for academically talented students have been observed (Kulik & Kulik, 1989). This is to suggest that teachers must differentiate instruction for the diverse groups for within-class grouping to be successful. A concern that arises from differentiation is the teachers' willingness and ability to learn new techniques for classroom management (Tomlinson, 1999). As teachers attempt to differentiate instruction for the various ability levels, teachers often assign skill worksheets to groups in order to facilitate

classroom management (Tomlinson, 1999). By doing so, this prohibits students from working at higher levels of thinking for all students (Tomlinson, 1999).

In addition to gifted students having positive academic effects from within-class groupings, Allan (1991) found that average and low-ability students may benefit from within-class grouping as well. However, there is little benefit from grouping by general ability (Allan, 1991). Therefore, special grouping arrangements may be necessary to meet the different ability levels of students in heterogeneous classrooms (Tieso, 2002).

Self-Concept and Self-Efficacy

Grouping practices have been scrutinized for many years because of the perceptions of elitism and possible damage to students' self-concept and self-efficacy (Shields, 2002). Self-concept is one of many terms used interchangeably with self-esteem and self-efficacy (Marsh & Craven, 2006).

Schunk (1996) defines self-concept as one's collective self-perceptions that are formed through experiences with others and the environment. Students, through different experiences, develop either a positive or negative self-concept of themselves. Marsh and Craven (2006) state that the construct of self-concept is built upon internal and external comparisons. For example, a gifted student's self-concept can be constructed through the comparison of their academic ability in math or language arts. Likewise, a gifted student's self-concept can also be constructed through the comparison of their own abilities to the perceptions they have of other students' abilities (Marsh & Craven, 2006). That is, through the perceptions of one's ability and the comparison

internally or externally, a student will construct his/her own self-concept (Plucker & Stocking, 2001).

Elitism can be defined as giving preference to some group based on a misconception of superiority (Fielder, Lang & Winebrenner, 1993). The perception of elitism has been perpetuated because of the ability of a child to function at an intellectually advanced level; therefore, making that child better than other children (Fielder, Lang & Winebrenner, 1993). Clinkenbeard (2012) found that “elitism” can be avoided by using flexible grouping strategies rather than permanent, or fixed groupings of students, and by creating groups based on interest, potential or achievement.

Having an advanced intellectual level implies that an educational need is present (Fielder, Lang & Winebrenner, 1993). Too often, this educational need is viewed as giving this child an unfair advantage (Fielder, Lang & Winebrenner, 1993). When students are identified with having an advanced intellectual ability, schools are faced with providing services for these children. The decision to group these students together, or to place them in different classrooms throughout the school fosters and perpetuates the misperception that ability grouping is elitist (Fielder, Lang & Winebrenner, 1993). Fielder, Lang and Winebrenner (1993) found that grouping only one or two gifted students in a heterogeneous classroom may have the effect of creating snobbery, thus perpetuating the myth of elitism that gifted educators attempt to abolish by helping students develop a realistic view of their ability. The authors assert that if gifted students are distributed throughout all the classrooms in the school, this programming decision may lead these gifted students to feel superior to their non-gifted

peers and promote arrogance (Fiedler, Lang & Winebrenner, 1993). This prolonged programming and grouping decision can lead gifted students to actually believe that he or she does know more than their non-gifted peers or they are better than their non-gifted peers (Fiedler, Lang & Winebrenner, 1993). These findings are important in understanding the effects of heterogeneous grouping on the self-concept of gifted students.

Gifted students specifically have a need for instruction aligned to their self-concept needs because of the tendency of gifted students to have heightened social and emotional feelings (Rinn, Plucker & Stocking, 2010). Homogeneous grouping may affect students' self-concepts because gifted students, who used to be the highest achieving students in their classroom, are now grouped with other students who achieve at the same advanced level. Olszewski-Kubilius and Turner (2002) found that there is a link between academic achievement and self-concept among gifted students. They found that gifted students' perceptions of their academic abilities also had a strong positive relationship to their academic performance. When gifted students are put in homogeneous, or self-contained classrooms or programs, gifted students experienced a more competent peer group than they might have experienced in a heterogeneous or regular classroom (Olszewski-Kubilius & Turner, 2002). This can be exciting for many gifted students, as well as, overwhelming and possibly detrimental. Being with competent peers can be exciting because a peer group with comparable intelligence may validate one's identity and reinforce talents and interests. Simultaneously, this can be detrimental, because individuals, who have had experience of being at the "top" of the

class and have enjoyed that status, are no longer at the “top”. The realization that there could be individuals who are just as, or even smarter than they are, can have a detrimental effect (Rinn, Plucker & Stocking, 2010).

In contrast, not all gifted students are negatively influenced in their academic self-concept by ability grouping (Preckel, 2008). Heterogeneous grouping affects gifted students because they are often the most high-achieving students in the classroom and either do better than their peers on a regular basis or they are not challenged because they are given the same academic tasks as their lower-achieving classmates (Huss, 2006). Heterogeneous grouping typically fails to inspire or advance most gifted students, leaving them bored, frustrated, and even anxious (Huss, 2006). In a study by Adams-Byers, Whitsell, and Moon (2004) found that gifted students achieve at a higher rate than their non-gifted peers in a heterogeneous classroom, gifted students expressed that the heterogeneous classroom created a negative environment in which gifted students were not appreciated by their classroom teacher or their non-gifted peers. Coleman and Gallagher (1995) reported that gifted students felt annoyed when non-gifted peers asked them for answers in a heterogeneous classroom. Additionally, these authors found that their non-gifted peers and teachers perceived gifted students as being too smart or pushy, or when their grades suffered because of the lack of effort from non-gifted peers in cooperative learning groupings, it angered the gifted students (Coleman & Gallagher, 1995). Rinn, Plucker and Stocking (2010) have found little credible evidence that praise, and a lower level of challenge provide a lasting change in a student’s intellectual achievement. However, these authors also note that challenge may

have a short-term, negative effect on self-concept, but a long-term positive effect as confidence increases over time.

Bandura (1994) defines self-efficacy as a person's beliefs about their capabilities to produce academically and in other performance situations. Self-efficacy has been linked to achievement, as students who believe they possess the skills necessary to succeed are more likely to attempt tasks at higher cognitive levels and work until they have achieved at those higher levels (Plucker & Stocking, 2001). Gifted students specifically experience an increase in self-efficacy because of an increased self-awareness and tendency towards perfectionism (Kulik & Kulik, 1982). Homogeneous grouping affects self-efficacy because students who are constantly challenged in a high ability group will continue to challenge themselves if they feel they are capable of the work, or give up if they feel they are not capable (Kulik & Kulik, 1989). Heterogeneous grouping affects self-efficacy of gifted students because students in mixed-ability groups are often not challenged at their learning level and so feel a false sense of self-efficacy due to the constant achievement at lower-level tasks (Kulik & Kulik, 1989).

Research on the effects of grouping on self-concept and self-efficacy is varied. Kulik (1985) found that grouping has minor effects regarding attitude and self-concept. Students who were homogenously grouped by academic ability had a better attitude toward learning due to the opportunities to learn higher-level, challenging tasks. Kulik (1985) also found however, that being grouped by ability did not change general attitudes about school. Ability grouping did little to affect the students' social

interactions and feelings towards students in non-core content classes that may or may not be gifted.

A major criticism of homogeneous grouping found was that it will lower the self-esteem of students in low-ability groups because they will not be challenged to learn at higher academic levels and have no high-ability peers after whom to model their academic and non-academic behaviors (Marsh & Parker, 1984). Cross and Swiatek (2009) found that gifted students experienced more social acceptance and had higher rates of achievement and adjusted to the school environment if given the opportunity to interact with their intellectual peers. However, low-ability students may experience success when grouped with like-ability students and high-ability students may face greater competition for the first time being grouped with like-ability students. Gifted students often suffer an early drop in self-concept and self-efficacy due to the presence of other high-ability students in their group and a challenging curriculum that they have not had to face in the past (Marsh & Craven, 2006). The perfectionist qualities of gifted students often take over here as they work hard to ensure that they meet the higher expectation of their teachers (Rinn, Plucker, & Stocking, 2010). This decrease in self-concept and self-efficacy was short-lived as gifted students become accustomed to higher-level curriculum challenges and working with other gifted students (Rinn, Plucker, & Stocking, 2010).

Self-efficacy has been shown to be affected by ability grouping of students (Feldhusen, 1989). Feldhusen (1989) found that watching someone of similar ability succeed raises another person's feelings of efficacy and motivates them to attempt a

task. Additionally, students gain the most from watching the person of like ability “cope” with the task rather than watching someone who, prior to beginning the task, has mastery-level skills (Hoge & Renzulli, 1993). Gifted students in both homogeneous and heterogeneous groups benefit from working with like-ability peers because they can learn from each other how to stay on task and work on a task until it is accomplished (Hoge & Renzulli, 1993). Because gifted curriculum materials allow students to work creatively or in open-ended assignments, gifted students push each other past the expectations of the teacher and healthy competition allows them to believe more in their own abilities as they watch their peers succeed in different, more highly cognitive ways (Van Tassel-Baska, 1986).

Gifted students see themselves as complex, multifaceted individuals and educators should recognize and support gifted students in either, a homogeneous or a heterogeneous environment (Rinn, Plucker & Stocking, 2010). Adults’ attitudes about grouping affected students and their achievement in ability-grouped classes as well (Rinn, Plucker, & Stocking, 2010). Teachers who perceived gifted students as role models for other students in a heterogeneous class tend to “use” gifted students as tutors and assistants for other student groups (Schunk, 1987). This can have mixed effects on gifted students as they either feel added self-concept due to their additional responsibilities or feel a lowered self-concept as they continue to work with students on lower-ability tasks rather than being challenged at their learning level (Rogers, 1991). Fiedler, Lang and Winebrenner (1993) state that the climate of the classroom is far more dependent on factors other than having gifted students as role models. Teachers should

consider multiple instructional situations for gifted students that allow gifted students to interact with intellectual peers as well as age peers (Rogers, 1991). These authors suggested that teachers should be allowed to have the flexibility to decide which instructional activities lend themselves to heterogeneous cooperative learning groups, and which instructional activities lend themselves to homogeneous learning groups (Fiedler, Lang & Winebrenner, 1993). The impact of a certain instructional situation on academic self-concept may be influenced by perceived competence of peers (Rinn, Plucker & Stocking, 2010).

Typically, children model their behavior after the behavior of like-ability children whether they are in homogeneous or heterogeneous groups. Kulik and Kulik (1982) found that the effects of grouping on self-esteem were very small and dependent upon program type. Programs for gifted students have trivial effects on self-esteem (Kulik, 1985). When gifted students are grouped together for a majority of the instructional day, this is most likely the first time that they encounter competition within the classroom. Some gifted students thrive in a competitive classroom; however, for some gifted students, a competitive classroom can foster social comparisons and relationships that may lower self-concept (Rinn, Plucker & Stocking, 2010). The competition faced by gifted students initially causes self-esteem to drop, but as students adjust and model their academic thinking and behaviors after their like-ability peers, the self-esteem of students adjusts back to previous levels (Rinn, Plucker & Stocking, 2010). Tomlinson (1999) recommends that gifted students need to have varied instructional situations that promote a positive self-concept. For example, gifted students should have

the opportunity to participate in cooperative groups, individualistic competitions and traditional competitions in which they compete against his or her intellectual and age peers (Rinn, Plucker & Stocking, 2010).

Labeling students according to ability may have some impact on self-esteem because labels attach either positive or negative expectations upon students. The impact of the labeling may be overshadowed by the effect of the comparison that the student makes between himself and others each day in the classroom (Kulik, 1985). Students' attitudes toward certain academic subjects were improved by grouping; however, Allan (1991) found that grouping was shown to have no effect on gifted students' attitudes toward school in general.

School-Within-a-School Programs

The school-within-a school concept or model, developed by general educators, was created as a part of school reform that focused on student achievement (Deweese, 1999). Educators advocated for these programs based on the increase in student achievement and the positive effects on student self-efficacy (Howley & Bickel, 2000). A school-within-a-school approach is a way to provide both gifted programming with the opportunity for gifted learners to interact with the non-gifted population in various ways that can be enriching for both populations (Matthews & Kitchen, 2007). The concept of the school-within-a school was an attempt to maintain the benefits of a larger school while creating the advantages found in smaller schools (Matthews & Kitchen, 2007). Specialized schools-within-schools are frequently in large urban schools to attract high achieving students (Borland, 2003). By creating these specialized

environments, exceptionally able students are provided with the higher level of complexity they require intellectually, as well as, social interactions obtained from participation in the larger community (Clark, 1997). Gifted programs in a school-within-a-school model typically have gifted students grouped as a learning community within the larger school structure (Matthews & Kitchen, 2007). Often gifted students take part in separate homogeneously grouped core content and special research classes, while attending elective classes in heterogeneously grouped classes (Deweese, 1999).

Just as heterogeneous grouping allows gifted students to take part in the same electives and extra-curricular activities as students who are not identified as gifted, the school-within-a-school structure often allowed students to enjoy the benefits that come with being a student in a larger school. The larger school structure brings benefits such as specialized staff, enhanced facilities and fewer administrative costs (Deweese, 1999). Gifted students are allowed to socialize with their non-gifted peers during electives and extra-curricular activities which takes away some of the stigma and feelings of elitism that often accompanies a special gifted program (Cox, Daniel, & Boston, 1985). In contrast, Ford (2003) noted that segregated gifted programming can create or exacerbate problems of equity and elitism. Students were typically divided according to measured or perceived performance in school, for example, gifted programs (Gamoran, 1992).

Oakes (1985) found that dividing students based on measured or perceived performance contributed to the separation of students from different racial, ethnic and social backgrounds. According to Matthews and Kitchen (2007), gifted school-within-a-school programs tend to exclude students of color and students living in poverty and are

used politically to propagate White flight. Gorman (1992) concluded that grouping rarely added to overall achievement in a school, but can contribute to inequality. The authors also asserted that even when there are no differences in the racial makeup of a gifted school-within-a-school, tensions can still be present when one program in a school is considered or perceived to be elite (Matthews & Kitchen, 2007).

Gorman (1992) suggested that the quality of instruction and the climate for learning favors high-ability groups over low-ability groups. An important aspect of this suggestion is the teacher's enthusiasm, or lack thereof, regarding the group they teach. In an attempt to eliminate the inequity of ability grouping, Gorman (1992) suggested that teachers should not be locked into certain track assignments, schools should implement flexible grouping systems where teachers rotate between groups so that all students have the opportunity to learn from the most effective teachers, and schools should improve instruction in low-ability groups to reduce the inequity found in schools.

Because of the smaller learning community with the larger school, gifted students experience many of the academic and social benefits that are associated with homogeneously grouped programs (Deweese, 1999). When core content classes are homogeneously grouped with gifted students, the teachers are able to accommodate for gifted students more easily and modify the curriculum materials and instructional strategies to meet the intellectual as well as the social and emotional needs of gifted students (Matthews & Kitchen, 2007). Students in a school-within-a-school model sometimes attended classes in a different part of the building to physically separate the gifted learning community from the other students. Although this type of configuration

might have some stigma associated with a gifted grouping, studies showed that this type of grouping did not have harmful social effects for students (Brody & Benbow, 1986).

The small school-within-a-school generates improved social-emotional aspects, such as relationships, connections, mentoring, and accountability for both students and teachers (Deweese, 1999). The most common configurations included separate learning programs within the larger school setting (Matthews & Kitchen, 2007). Gifted programs that followed this model often had a separate administrator with a separate budget and school code (Matthews & Kitchen, 2007). Critics argued that it is unfair to devote additional resources to such programs, particularly gifted programs, when there are greater needs in regular education programs, especially students at-risk (Oakes, 1985). Other examples of programs having a separate focus without the status of being a separate school included programs such as Gifted and Talented, International Baccalaureate, and numerous career academies (Matthews & Kitchen, 2007). School districts have used the separate school concept as an arrangement for gifted programming as well as career and technology academies or magnet programs that cater to specific student interests (Matthews & Kitchen, 2007). Students in a special school-within-a-school arrangement had the benefit of full-time instruction at a more advanced pace or depth of content (Cox, et al., 1985).

Students selected to participate in a school-within-a-school arrangement typically had a high ability or talent in a particular area. Students were able to select programs of study in the core content areas due to the smaller nature of classes and homogeneous grouping of gifted students. Gentry, Rizza and Owen (2002) examined gifted student's

perceptions of the amount of challenge and found that gifted students in gifted magnet schools reported significantly more challenging work than did their counterparts in gifted or heterogeneous classes. Often smaller learning communities allowed for increased independent research that had been shown to increase gifted performance, meeting the special academic and creativity needs of gifted students (Matthews & Kitchen, 2007). Of interest to parents was whether students had the choice to attend a school-within-a-school gifted program, because these programs were often centrally located within a school district, with students from various campuses attending them. Student self-selection into the program allowed for students to select and have choice in their instructional setting, which has been shown to improve the academic and social needs of gifted students (Matthews & Kitchen, 2007).

In a school-within-a-school arrangement, students had the opportunity to interact with their like-ability peers daily during core content classes; however, this arrangement was not as common as other arrangements for gifted programming (Matthew & Kitchen, 2007). The expense associated with this arrangement steered many school districts away from the arrangement, as well as the expense of hiring staff, purchasing additional equipment, and maintaining an additional building (Deweese, 1999). Despite the added expenses of this particular arrangement there are several positive attributes to this arrangement. One major strength of this arrangement was the opportunity to offer an optimal, and appropriate curriculum for gifted learners in all the content areas, as well as, the opportunity for gifted learners to interact with students in elective courses, co-curricular and extra-curricular activities. (Cox et al., 1985).

An arrangement that mirrors the school-within-a-school concept was a separate class arrangement for gifted students. In this arrangement students were grouped by ability for most, if not all, of their core content courses (Gallagher et al., 1983). In this arrangement, gifted students had limited contact with other students who are not in the gifted program other than for classes such as art, music, physical education, or other elective courses (Gallagher et al., 1983). Students were able to benefit from the academic rigor and choice that comes with being grouped with like-ability peers in core content courses, while having the benefits associated with interacting with mixed-ability peers in other courses (Rogers, 2002). This grouping eliminated some of the stigma placed on gifted students by allowing them to maintain social connections with their non-gifted peers (Rogers, 2002). The stigma associated with students being in a completely homogeneous grouped program was also minimized because of the shared facilities and resources (Matthews & Kitchen 2007).

Through their research of school-within-a-school gifted programs, Brody and Benbow (1986) found no harmful social or emotional effects in placing gifted students in this type of arrangement. Additionally, researchers found that students in this arrangement were relieved from the repetitious nature of regular education classes (Feldhusen & Kroll, 1985), and are more likely to share their interests with other students within their group (Rogers, 2002). This showed that not only do gifted students benefit from a school-within-a-school model, but also their non-gifted peers, which was a similar benefit of heterogeneously grouped programs.

Despite the positive aspects of the gifted programming arrangement, researchers have found disadvantages to the school-within-a-school model. Van Tassel-Baska (1986) indicated the possible negative effects of insensitivity to non-gifted peers as a barrier to school-within-a-school programs. Because of the mix of heterogeneous and homogeneous classes, gifted students often must learn to interact with peers in different classes in different ways (Matthews & Kitchen, 2007). As gifted students were challenged in rigorous core content courses with their like-ability peers, they sometimes became impatient in elective courses where teachers must differentiate for both gifted and non-gifted students, often reverting back to whole-group monotonous instructional strategies (Tomlinson et. al., 1996). Van Tassel-Baska (1986) also identified disadvantages stemming from the development of self-concept based on perceptions of ability rather than reality. As gifted students compared themselves to non-gifted peers in elective courses, there was often a false sense of increased abilities (Brody & Benbow, 1986). Teachers must be trained to work with gifted students as to meet the specific social and emotional difficulties associated with a school-within-a-school structure (Matthews & Kitchen, 2007). Matthews and Kitchen (2007) found that gifted and non-gifted students in a school-within-a-school setting frequently identified certain teachers as program strengths. Many gifted students stated that there were certain teachers that were better suited than other teachers to work with them (Matthews & Kitchen, 2007).

Programming Choice

The programming arrangements school leaders choose for their gifted students are critical because these choices affect students, teachers, communities, and the

resources allocated for those involved. The implications from choosing a program, whether it is homogeneous, heterogeneous, or school-within-a-school can have a long-lasting impact on student achievement and resources. Because of the critical nature of choosing a program that best fits the needs of the local school district and community, school leaders should communicate with students, teachers, and parents when selecting and designing a gifted program. The arrangement choice for gifted students has affects in the areas of resources, social needs, and academic achievement (Matthews & Kitchen, 2007). Rogers (2002), in her meta-analysis, concluded that gifted learners need some type of ability grouping to meet their intellectual needs. Rogers (2002) found that full-time gifted programs show the strongest benefits, followed by cluster grouping within heterogeneous classes, acceleration of the curriculum through such methods as telescoping, reducing the amount of time a student takes to complete the curriculum; regrouping for enriched learning in specific subjects; cross-grade grouping or non-graded classrooms; enrichment pullout programs; and within-class ability grouping.

The arrangement of gifted students in a school has an impact on the distribution of human and financial resources for the program arrangement (Morgan, Tennant & Gold, 1980). This is important for schools to consider, but it should not be the driving force that determines which arrangement is implemented. Typically, heterogeneous grouping required the least outlay of capital costs because students attended their regular school and are grouped within the regular classroom, utilizing the same resources (Holloway, 2003). Homogenous grouping tends to cost more because of the need to train and hire teachers for classes of gifted students and purchasing of curricular

materials to match the rigor of the higher academic needs of gifted students (Rogers, 2002). The costliest grouping tends to be a school-within-a-school model because students were often bussed to a central location in the district and a separate administrator and group of teachers is hired to run the smaller learning community (Deweese, 1999).

The arrangement of gifted students also determined the amount of interaction gifted students had with their intellectual and same-age peers, thus affecting the overall social and emotional well-being of students (Plucker & Stocking, 2001). Wright (1997) found that gifted students enjoy being with their gifted peers; however, they were conscious of being labeled as different. With this label, gifted students learned to cope in many ways. In an attempt to fit in, to be perceived as normal, gifted students often suffer a shift in their social self-concept (Plucker & Stocking, 2001). Zeidner and Schleyer (1999) found that full time gifted classes emphasized the negative aspects of being identified as gifted. This finding supported the argument for heterogeneous grouping because of the negative social labeling that was associated with full time gifted programming. These authors also noted that this isolation, without an opportunity to socialize with their non-gifted counterparts, perpetuated the negative perceptions of participating in full time gifted classes (Zeidner & Schleyer, 1999). Adams-Byers, Whitsell and Moon (2004) suggested that school administrators should include a broad array of services to provide both homogeneous and heterogeneous grouping options for gifted students to maintain frequent opportunities for interaction with gifted and non-gifted peers. In homogeneous or school-within-a-school arrangements, gifted students

saw themselves as average because of their social comparison with peers who are just as or more talented (Hoge & Renzulli, 1993). In social situations, gifted students often isolated themselves because of their intellectual ability (Shields, 2002). The pressure to conform, or not to let it be known that one is smart, was something that gifted students struggle with in all program arrangements, including heterogeneous and homogeneous settings (Adams-Byers, Whitsell, & Moon, 2004). Adams-Byers, Whitsell and Moon (2004) found that some gifted students wanted the best of what homogeneous and heterogeneous grouping offered: the academic challenge and stimulation of the homogeneous classroom and the high rank and the social interaction among their non-gifted peers.

The arrangement of gifted students affected the overall academic achievement of gifted students because of the curriculum and instructional strategies used within the various grouping strategies (Cox et al., 1985). A positive academic self-concept was an important part of student achievement, particularly with gifted students and how they were grouped (Rinn, Plucker, & Stocking, 2010). Gifted students reported positive feelings toward like-ability arrangements because of the individualized attention, the ability to express themselves in class, and being interested in the content of the class (Wright, 1997). Gifted students in homogeneously grouped classes reported that they are not bored with the curriculum content because the teacher is more likely to accommodate various learning styles and independent research (Preckel & Brull, 2008). However, when classrooms are restricted to a group of like-ability individuals, gifted students sometimes suffered a decrease in academic self-concept as they compared

themselves to their like-ability peers. Festinger (1954) stated that students would tend to evaluate themselves academically by examining their own opinions and abilities in comparison to others in his theory of social comparison. With perfectionism and perceptiveness as common characteristics of gifted students, feelings of inadequacy often accommodate homogeneously grouped classes (Tomlinson, 1999).

Summary

Every school district must make decisions regarding the curriculum, instruction, assessment, and grouping of gifted students. These decisions affected not only the gifted students themselves, but also their non-gifted peers, teachers, parents, and community members who call on school officials to judiciously and fairly allocate school resources. Three common strategies for grouping gifted students included homogeneous grouping, heterogeneous grouping, and school-within-a-school models that incorporated aspects of both other groupings. However, each of the grouping strategies had benefits and drawbacks that affected the social and academic needs of gifted students.

Homogeneous grouping has been found to have a positive academic affect for students as they are challenged more with their like-ability groups (Kulik & Kulik, 1985), but there are social drawbacks including stigma for students who are labeled gifted and separated from their age peers (Shields, 2002). Heterogeneous grouping has been shown to eliminate some of the stigma of students being labeled as gifted, but academic achievement of gifted students is often stifled as they are educated in the same setting as their mixed-ability peers, making it more difficult for teachers to meet their specific needs (Huss, 2006). The school-within-a-school model met the academic needs

of gifted students by challenging them in homogeneous core content classes (Matthews & Kitchen, 2007). It also met their social and emotional needs by allowing them to interact with mixed-ability peers in heterogeneously grouped elective classes (Matthews & Kitchen, 2007). However, the school-within-a-school model still included some stigma from labeling (Matthews & Kitchen, 2007) and was a costly endeavor for schools with limited funding (Deweese, 1999).

The self-concept and self-efficacy of gifted students was highly dependent upon the grouping situation, the culture and climate of the school, and the teacher the gifted student interacted with daily (Gentry, Rizza, & Owen, 2002). The research emphasized the construction of a gifted student's self-concept through the comparison of their abilities to other gifted students in a given grouping arrangement (Plucker & Stocking, 2001). Therefore, the grouping arrangement played a large role in this social/emotional domain of a gifted student. The research also indicated that a gifted student's perception of oneself varies as well based on grouping arrangement. Some gifted students preferred homogeneous grouping for the intellectual stimulation and the safety the homogeneous grouping provided (Shields, 2002). For these students to be with other students like themselves, an increase in self-concept was evident (Shields, 2002). However, some gifted students preferred heterogeneous grouping for the social interaction (Shields, 2002). Not being stressed because of the lack of challenge was appealing to some gifted students and an increase in self-efficacy was evident (Shields, 2002). What was consistent in the research was that grouping shows no effect on gifted students' attitudes toward school.

More research needs to be done as to the benefits of the school-within-a-school setting for gifted students. Because of the relatively low number of programs following this model, the research is limited in this area. As school district leaders make decisions that affect academic achievement, social needs, and resource allocation, it is critical that they have the information necessary to understand whether the school-within-a-school model is the best choice for the local school district. Most importantly, as a district considers the school-within-a-school model careful consideration must be made to build positive relationships across and among programs in a school-within-a-school model.

CHAPTER III

METHODOLOGY

Overview of the Methodology

The purpose of this qualitative study was to explore, describe, understand, and interpret the perspectives and experiences of gifted middle school students (Manen, 1990) and their parents with the GT Academy, school-within-a-school setting while examining the social construct of self-efficacy. To understand how these students and their parents arrived at their decision to attend the GT Academy at Mission Valley Middle School and to understand their experiences, the researcher took an in-depth look at their thoughts, and decision-making processes. A thick description of each subject's thoughts was developed to re-create and portray the experience each participant lived.

This qualitative study used the case study research strategy with semi-structured interviews and observations to collect data. Data from the semi-structured interviews, observations, field notes and a reflexive journal was collected over one academic semester. The case study methodology allowed the researcher to explore the self-concept/self-efficacy of gifted middle school students in a school-within-a-school context. Additionally, the method allowed both student and parent participants to share their lived experiences with the researcher.

Data Sources and Context

The study took place in a large suburban middle school with approximately 1200 students. Of the 1200 students, approximately 540 students are identified as gifted and

talented and participate in the GT Academy. To qualify for gifted and talented services in the school district, students must score in the ninety-fifth percentile on quantitative ability and achievement norm-referenced assessments. In addition to the quantitative assessments, qualitative data is also collected to determine giftedness as outlined in the Texas State plan for the Education of Gifted/Talented Students. In this school district, students in grades six through eight have the opportunity to participate in the GT Academy at Mission Valley Middle School. This GT Academy is a school-within-a-school designed to be a program option at the middle school level. In order to participate in the GT Academy, students must be identified as gifted and talented according to the district's criteria and submit an application. If students meet the criteria outlined by the district, the student is offered the opportunity to participate, or may choose not to participate in the GT Academy and attend the middle school they are zoned to attend.

This middle school was the only middle school in this district that used homogeneous grouping as part of its program design. The other middle schools in the district grouped gifted and talented students heterogeneously. Grouping gifted students in this manner provided gifted and talented students with minimal contact with their intellectual peers throughout the school day. Mission Valley Middle School was selected because of its school-within-a-school structure by grouping gifted and talented students homogeneously and its racial and socio-economic diversity.

Purposeful sampling was used to select participants for the study to maximize differences of participants at the beginning of the study to increase the likelihood of

varied findings or perspectives at the end of the study (Creswell, 2007). The researcher requested that the GT Academy Coordinator assist in the selection process by identifying GT Academy students and their parents to participate in the study. From this sample, parents had the opportunity to choose to participate, or not to participate in the study. The participants selected for the study varied in gender, age, racial and socio-economic make up to provide rich data that allowed for an in-depth study of non-academic self-concept of homogeneously gifted students in grades 6-8 in a school-within-a-school setting. Participants included six gifted and talented students enrolled in a gifted and talented school-within-a school program in grades 6-8 and six parents of gifted and talented students participating in the program. In order to qualify as a participant, a student must have been identified as gifted by school district criteria, must have attended the GT Academy in 2015-16, must not live in the GT Academy attendance zone for 2015-16, and must have actively chosen to attend the GT Academy by submitting an application for acceptance. The demographic characteristics of the students who participated in the study are shown in Table 1. Table 2 shows the demographic characteristics of the parent participants in the study. Every attempt was made to balance grade level, gender, ethnicity for the final participants selected. In the end the researcher selected 6 student subjects who exhibited a wide range of gifted characteristics.

Table 1*Demographic Characteristics of Selected Student Participants*

<u>Grade</u>	<u>Gender</u>		<u>Ethnicity</u>			
Students	Male	Female	Asian	African American	Hispanic	Caucasian
6 th grade	0	0	0	0	0	0
7 th grade	1	2	0	0	0	3
8 th grade	1	2	2	1	0	0
Total	2	4	2	1	0	0

Table 2*Demographic Characteristics of Selected Parent Participants*

<u>Ethnicity</u>	<u>Male</u>	<u>Female</u>
Asian	1	1
African American	2	2
Hispanic	0	0
Caucasian	3	3

Of the six subjects selected for participation in this study, three were from the seventh grade, one was male, two were female, all seventh-grade subjects were Caucasian. Three were from the eighth grade, one was male, two were female, two were Asian, one was African American.

Elise was a seventh grade, Caucasian female who was identified as gifted according to the district's criteria and has attended the GT Academy for two years. Ophelia was a seventh grade, Caucasian female who was identified as gifted according to the district's criteria and has attended the GT Academy for two years. Kevin was a seventh grade Caucasian male who was identified as gifted according to the district's criteria and has attended the GT Academy for two years. Ethan was an eighth grade, African American male who was identified as gifted according to the district's criteria and has attended the GT Academy for three years. Toni was an eighth grade, Asian female who was identified as gifted according to the district's criteria and has attended the GT Academy for three years. Sarah was an eighth grade, Asian female who was identified as gifted according to the district's criteria and has attended the GT Academy for three years. These names are fictitious and were assigned by the investigator to ensure the identities of the subjects would remain anonymous during this study.

The human investigator was the only instrument used in this study. Lincoln & Guba (1985) describe the advantage of using the human as the sole data-gathering instrument for case study research. These advantages are:

1. The human instrument was able to respond to the personal and environmental cues.

2. The human instrument collected information from multiple factors and at multiple levels simultaneously.
3. The human instrument viewed the phenomenon and its context holistically.
4. The human instrument built upon the base of tacit knowledge by picking up non-verbal cues.
5. The human instrument summarized data and sought clarification from the respondent on the spot.
6. The human instrument analyzed atypical responses to gain a higher level of understanding.

The following procedures were conducted during the case study:

1. Selection criteria for students who would be participating in the study were developed.
2. The subjects were purposefully selected for participation based upon selection criteria.
3. Student and parental permission for participation was gathered prior to the beginning of the study. Permission documents were securely stored.
4. Structured interviews with the participants were scheduled and conducted in a one-on-one setting at the GT Academy. Each interview lasted less than an hour and was conducted at a time that did not interfere with instruction.
5. Transcripts were created and analyzed within seven days of each interview.
6. Interview transcripts were converted into a thick description of each participant's thoughts and actions to summarize the process they went

through to make their decision to attend the GT Academy and what their experiences were during the time they attended the GT Academy.

Data Collection

This qualitative study used several strategies for data collection including interviews, observations and field notes (Merriam, 1988). Semi-structured interviews were the primary strategy used to collect data. Protocols for recording information was developed to store data from the interviews and field notes (Creswell, 2007). A series of pre-established questions were used for the interviews (Erlandson, 1993). The questions asked gathered demographic information and student perceptions of their self-concept/self-efficacy to provide a thick description of the participants' lived experience. The interviews were recorded and transcribed. The data from the interviews were thematically coded to identify themes specific to self-concept/self-efficacy.

Observations of participants took place in the students' classrooms and areas of the school, such as the cafeteria, in an attempt to establish an insider identity; gain entrée, and to acquire a better understanding of how students interacted with other students (Creswell, 2007). Three hour-long classroom observations were conducted throughout the fall semester of the 2016. The classroom observations took place in the classroom of the students who participated in the study. The purpose of the classroom observations was to understand how the homogeneous grouping of gifted middle school students impacted their self-concept/self-efficacy. Both student and teacher behaviors, such as interactions between and among the students, interactions between the students and the teachers and the students' behavior during instructional activities were observed

and noted. Additionally, observations took place in the hallways of the school during transitions from class to class. The purpose of these observations was to understand the interaction between the student participants and other students within the GT Academy and students who attended Mission Valley Middle School who did not participate in the GT Academy.

The data was collected over one academic semester with two interviews. The initial interview taking place one month after the academic year began, and the second interview taking place approximately two weeks before the conclusion of the academic semester. This allowed for maximum exposure to the school-within-a-school experience.

Data Analysis

Responses from the interviews were transcribed, grouped by theme and analyzed to describe how the students' non-academic self-concept developed and possibly changed throughout the academic year. Field notes were analyzed to find recurring themes and commonalities with themes that emerged from the interviews were also analyzed.

To establish the reliability for the study, the process of triangulation, analyzing both the responses from the interviews and the field notes from the observations, allowed each source to validate the data (Denzin & Lincoln, 1998). The transcripts from both interviews were given to the participants to give them opportunity to correct errors of facts or volunteer additional information through member checking (Denzin & Lincoln, 1998).

Codes used from prior research and the findings were used to identify themes and to develop a coding process (Boyatzis, 1998). The three themes were: (a) environmental perceptions, (b) task value, and (c) self-efficacy. Using Bandura's social cognitive theory provided multiple perspectives to code the data collected from interviews and observations. The qualitative research method used in this study allowed the researcher to delve into the life experiences of the subjects and to gain an understanding of the thoughts, reasons each participant chose to attend the GT Academy and what their lived experiences had been during their time at the GT Academy.

CHAPTER IV

FINDINGS

Background Information

In order to understand the significance and need for the GT Academy, a brief historical look must be taken at the development of this program option for gifted middle school students. The GT Academy was created out of a from the school district superintendent to develop a GT Academy for middle school students. In the fall of 2007, extensive research was conducted by the district's GT Coordinator to develop a school-within-a-school for GT middle school students. In addition to the research, several meetings were held with secondary curriculum content coordinators to develop a curriculum model best suited for the students who would attend in the GT Academy. In January of 2007, a series of community meeting were held to inform parents and students what the GT Academy was and what the GT Academy would offer students if they choose to attend the GT Academy. In the summer of 2007, parents submitted applications, students participated in screening assessment and interviews. In the Fall of 2007, the GT Academy opened with 100 sixth grade gifted and talented students in a school-within-a-school setting.

Over the last eleven years, the enrollment of the GT Academy has grown exponentially, and a wait list was developed to accommodate the number of applicants seeking an opportunity to attend the GT Academy. This increase in enrollment at the GT Academy has generated a large amount of interest and a desire to attend the GT

Academy. This interest has caused district level administrators to investigate the homogeneous grouping practice and the instructional strategies implemented at the GT Academy.

The following case studies revealed how the selected subjects arrived at their decisions to attend the GT Academy, the process they went through in deciding to apply to the GT Academy, the influences upon their decision, their expectation for the GT Academy, if their expectations have or have not been met, if they would make the same decision to attend the GT Academy if they were given the opportunity to do so.

Results

As discussed in Chapter I, the prior research resulted in a model for students' learning occurring in a social context where what is learned is gained through observation. The model used in this study suggested personal factors, behavioral factors and environmental factors influence on another in a bidirectional or reciprocal fashion. A student's functioning is a product of continuous interaction between cognitive, behavioral and contextual factors (Bandura, 1986). Classroom learning is shaped by factors within the academic environment, especially the reinforcements experienced by one self and by others. Learning is also affected by students' own thoughts and self-beliefs and their interpretation of the classroom context.

For this study, students were asked to reflect on their experiences within their present context or academic setting and to how they felt about their experiences. However, while students in the prior study were asked to reflect on a specific classroom experience, the students and parents in the present study were asked

to reflect on all of their experiences they had while attending the GT Academy. For the students and parents in the present study, their experiences in the two to three years attending the GT Academy focused on their decision to attend the GT Academy, their experiences in the classroom and their perceptions and reflections of participating in the GT Academy.

The decision for participation in the GT Academy was attributed to what information the students and their parents received during information meetings prior to completing an application to attend the GT Academy. Parents in the present study were faced with a decision that would change their child's educational experience in grades six through eight, and ultimately chose to have their child participate in a setting in which their child would be homogeneously grouped for the core content courses. Students in the present study expressed that their experiences with certain teachers had influenced their experiences in positive ways. The students described situations and characteristics that are incorporated in Bandura's Social Cognitive Theory (1986) and are mirrored in the Achievement Orientation Model (Siegle & McCoach, 2005). The elements of the model include environmental perceptions, task valuation, and self-efficacy.

The results from the present study were analyzed utilizing categories from an a priori theory showing how grouping gifted and talented students in the school-within-a-school interacted with non-academic self-concept. These categories were (a) personal factors, (b) behavioral factors, and (c) environmental factors. The interview responses were separated by the categories and were placed in multiple categories if similarities

arose from the analysis. Common themes emerged when participants' responses were analyzed from the interviews and were categorized as belonging to one of three themes: (a) environmental perceptions, (b) task value, and (c) self-efficacy mirroring the characteristics found in the Achievement Orientation Model. (Siegle, McCoach and Roberts, 2017).

Sub-themes were chosen based on participant responses to assist with analyzing the interview and observation data (see Table 3). Student and parent responses were coded into one of the three themes based on statements used to describe their experiences in the classroom and their perceptions and reflections of participating in the GT Academy. By analyzing the responses based on the themes and subthemes, implications for practice can be sought based on the work campus and district administrators can do to provide social and emotional support for gifted students and training for teachers to provide meaningful instruction.

Table 3

<i>Themes and Subthemes Utilized for Data Analysis</i>	
<u>Themes</u>	<u>Subthemes</u>
Environmental Perceptions	Positive social relationships Knowledgeable teachers
Task Value	High challenge level Meaningful content Grades
Self-efficacy	Personal growth and satisfaction

Environmental Perceptions

The first theme used to categorize interview data was environmental perceptions. Students' perceptions of school and their teachers have an impact on students' attitudes and behaviors (Siegle, Rubenstein & Mitchell, 2014). A student's perception does not have to be true for the student to believe it is true and for it to impact their motivation and behaviors (Siegle, Rubenstein & Mitchell, 2014). Perception is important for teachers and administrators to recognize. For example, because even if a teacher believes he or she is supporting students, students may have a different perception and not feel connected to their environment.

Positive Social Relationships

Interview questions including the level of comfort of attending the GT Academy were used to develop an understanding of the students' self-concept and the parents' perception of their child's self-concept. An individual's self-concept is the result of interactions and experiences with others (Mendaglio and Pyryt, 2003). Data from the interviews indicated the reasons parents wanted to have their students the GT Academy. Additionally, the data from the interviews provided insight into why students attended the GT Academy. Parents expressed that having their child attend the GT Academy was the right or best decision, as well as, having the opportunity to be with other students who have the same interests, or to be accepted socially or "fitting in". The social struggles of gifted students are not so much that gifted students are inept in social situations or lacking social skills, it is more that society, or other students do not understand the behaviors of gifted students (Trepanier, 2015). This is where gifted

students struggle to “fit in”. Ethan shared, “I was worried the other kids wouldn’t understand me. They wouldn’t get me. Some kids my age think I’m weird, so they don’t want to hang out with me, or they call me names.” Additionally, Ethan shared that other classmates do not understand why he gets so excited about certain topics when conversing with them, or that he knows a great deal more about certain topics than his classmates. Gifted students’ above-average intelligences, emotional intensities, extreme sensitivities and their complex topics of interest can make them stand out in an unfortunate way among same-age peers, and this often results in their peers rejecting them. This is the concern that Ethan expressed. Ethan wanted his peers to know, “I’m just being myself; this is who I am.” Gifted students are often unaware that while they are excitedly conversing with classmates about a highly advanced topic, they are coming across to their classmates as a “know-it-all”, or as being arrogant.

Kevin, had a different experience with “fitting in”. Kevin shared, “many of my friends from elementary school are in the GT Academy, so I wasn’t worried about ‘fitting-in’”. Kevin mentioned his friends understand who he is and many of them share the same interest in certain topics, but there are times when he has to “tone it down”, he said. Kevin has learned to manage his intensities and excitabilities to maintain a positive relationship with his peers. This skill, or behavior management is advanced for gifted students his age. Kevin felt the social relationships he had with gifted and non-gifted students at the GT Academy was positive. He mentioned he had friends in the GT Academy and friends in the “zoned” portion of the school. While Ethan sees himself as

an outlier, Kevin was fortunate enough to discover a group of like-minded peers at the GT Academy to have a sense of “fitting-in” or belonging.

Students’ positive perceptions of the school environment lead to higher levels of confidence for their self-concept (Brigandi, 2016). One student stated “if I feel like I “fit in” with the other GT and non-GT students, I wanted to be part of the GT Academy and continue to participate in the GT Academy.” For Elise, she heard about the GT Academy from friends in the neighborhood. She said, “my parents were the ones who made the final decision, but they asked me for my opinion.” There were five other students from her elementary school and neighborhood who decided to attend the GT Academy as well. She said. “I would have come even if I had been by myself, because I wanted to be challenged and to learn new things.” When she first arrived at the GT Academy, she “felt out of place.” During the first few weeks of school in sixth grade it took her time to make new friends, besides the students from her elementary school she already knew. These findings are important because they illustrate the varied social and emotional levels of gifted children. In one case, the student struggled to navigate the social context of middle school and was afraid to participate in the GT Academy because of his past experiences with his age peers, and in another case, the student has learned how to manage behaviors that his age peers identify as being different, or not normal. Having the opportunity to interact with other students who are similar gave them the opportunity to be themselves and the opportunity to understand one’s own emotions and how to relate with others socially. Participating in the GT Academy provided students the

opportunity to demonstrate characteristics a positive self-concept that mirror the bi-directionally of behavior and environmental factors (Bandura, 1986).

For parents, environmental perceptions focused on the level of support their student who receive or the perceived level of support their child would receive from those around them. Students are less likely to engage and be productive in environments they perceived as being less supportive (Rubenstein, Siegle, Reis, McCoach, & Burton, 2012). Prior to attending the GT Academy, parents had discussions with other parents about how their children would interact with other gifted students as well as the other students who attended the school. Stephanie was a parent who had concerns her daughter attending the GT Academy. She described her concerns with her daughter being accepted socially or “fitting in”:

I, just like many of the parents, had the same concern of their child “fitting in” with the other students. My daughter would not be with all of her friends from elementary school, would my daughter be okay? What kind of support would she get from the teachers or the administrators? Would there be a time when she would be able to meet other GT Academy students before school starts?

As a person faces new situations in life one’s self-concept or insight toward oneself will change on the way they respond to the change (Fournier, 2016). Given Stephanie’s concern about her daughter “fitting in”, an administrator at the GT Academy would consider opportunities for incoming GT Academy students to interact with each other before the beginning of the school year.

The concerns expressed by Stephanie were echoed by other parents of GT Academy students. Danielle's reflection on why her son attended the GT Academy was more than an academic reason. She came to the realization her son needed to be in an environment where her son could be himself and the academics were a by-product of a safe and nurturing environment. Danielle stated,

There are a lot of kids like Ethan. You're the parent of a gifted kid, you know what weird is. And so, when you have one of those kids, you have a tendency to bubble wrap or you just want them to be bubble wrapped and protected.

Danielle was a parent who felt the GT Academy would be a place where her son would "fit in", a place where he could have positive social relationships with his peers. Danielle shared that Ethan's first year was not as easy as she had anticipated. While Ethan was "fitting in" at the GT Academy, Danielle felt the teachers were complacent with Ethan's academic performance. She shared,

I couldn't put my finger on then, but now I know. By the time you get to eighth grade, it's just not stressful anymore." She emphasized, "but again, a lot of that was Ms. Adams really did to make that easy. So, she helped a lot with that. It helped a lot with that.

The feeling of complacency from Ethan's teachers that Danielle shared was a major concern for her. Danielle knew that Ethan was capable of achieving more academically. Danielle shared, "Ethan's grades are fine, but I know he can do better." "I'm not sure he's being challenged." Danielle sought the support of Ethan's teachers and she shared that the teachers told her that Ethan was doing fine and that she shouldn't worry.

Danielle reached out to campus administrators for help. Danielle needed a way to communicate with the teachers and Ms. Adams, the GT Academy Coordinator, was able to assist Danielle with communicating with the teachers. Danielle expressed, “the amount of support I received was amazing, and I know that the GT Academy was the right place for Ethan and for our family.” The positive environment established for the students was what parents wanted for their gifted children. The responses of these students and parents demonstrated that positive relationships are important in having a positive self-concept. Additionally, the positive environment established at the GT Academy had a positive impact on not only the students’ academic achievement, but also their socio-emotional growth as well (Brigandi, 2016).

In addition to the level of support their child would receive at the GT Academy, parents were concerned about the negative perception of the school where the GT Academy was housed. Tammy, a parent, searched for more information about student relationships at the GT Academy from school administrators and parents of current GT Academy students. She stated, “I struggled with making the decision to send my daughter to the GT Academy. I had to rely on my own personal beliefs and that attending the GT Academy would be the best decision for her.” Janet made an informed decision to send her daughter the GT Academy. She trusted school administrators to create, foster and maintain a safe environment where all students, including her daughter, would be able to develop positive relationships with all students.

Toni shared, “I’d only heard bad things about the GT Academy. I’d heard that the kids were bad and the school was unsafe. I didn’t want to go to a place where I

didn't belong and the other students knew I didn't belong there." Toni's negative perception of the school where the GT Academy is housed weighed heavily in Toni's decision to attend the GT Academy. Toni's perception is derived from person-environment fit theory (French, Rodgers, & Cobb, 1974), which in part, states when there is a discrepancy between person and environment, underachievement can occur. It is important to keep in mind that students' perceptions may not be accurate; however, students have a need to believe that those around them want them to be accepted and be successful (Peterson, 1996). Fortunately for Toni, what she heard prior to attending the GT Academy and what she actually experienced was different. Toni was able to maintain her friendships with her neighborhood friends and made new friends in the GT Academy. Despite the concerns she expressed, Toni's parents ultimately decided she would attend the GT Academy. Toni's experience continued to emerge throughout the interviews of students in the present study.

For Elise, she heard about the GT Academy from friends in the neighborhood. She said, "my parents were the ones who made the final decision, but they asked me for my opinion." There were five other students from her elementary school and neighborhood who decided to attend the GT Academy as well. She said, "I would have come even if I had been by myself, because I wanted to be challenged and to learn new things." Elise was a seventh grader who was taking Algebra I. Having this opportunity was exciting for Elise; however, this opportunity did come with some hesitation on her part. Elise shared, "I was a bit nervous at the beginning of the year because I thought I would be the only seventh grader in my Algebra class." She added, "being with the

older kids was kinda scary and I felt out of place.” When she first arrived at the GT Academy, she “felt out of place” because of her acceleration in math. During the first few weeks of school in sixth grade it took her time to make new friends, besides the students from her elementary school she already knew. After several week of getting to know other students in the GT Academy and doing well in the heterogeneously grouped Algebra I class, her outlook began to change. Her personal comfort and self-confidence changed when she made new friends and performed academically well in a class where she was not with her age peers when. Because she was confident about who she was in relation to her age peers and achieved success in a heterogeneous setting, she had no major concern about “fitting in” or what other students would think about her. To be able to develop positive social relationships attributed to her academic success in the GT Academy and her social and emotional growth (Brigandi, 2016).

Anne, a parent in the current study, searched for more information about student relationships at the GT Academy from school administrators and parents of current students. She visited the school to see the environment. She wanted to see if what she heard in the community was true. Anne shared, “the school was just like the others in the district. Nothing stood out as negative to me and what was happening in the classrooms was amazing.” Anne concluded that she had to rely on her own personal beliefs and her daughter attending the GT Academy would be the first or many new experiences, both social and academic. Having her daughter attend the GT Academy would be the best decision for her daughter.

The social comparison among gifted students in the environment established at the GT Academy does impact a student's self-concept (Marsh, 1984). Helping students understand and cope with perceptions of how other "see" them and how to "fit in" can create and foster positive experiences for students participating in the GT Academy. Of the parent participants in the study, Danielle had serious concerns about the social aspect of her son attending the GT Academy, but her concern focused on her son's friends who were not attend the GT Academy. Danielle explained,

The only issues we would kind of have was with his friends who weren't GT. Evan, my son, has many friends who are not GT, so he would have the issue of them being in the regular school and him being in the GT Academy. There was a little bit of negativity with friends. It's more of a jealousy that they wanted to be in the Academy and were not able to be in the GT Academy because they are not identified as GT.

For Danielle, no matter where her son attended school, bullying was a major concern for her. She shared, "I was worried about Butler Middle School, because Butler Middle School, although is in a really nice neighborhood and everything, has a really reputation for bullying and all of those things. And Ethan is that kid that's gonna be bullied. He's big...so he's never gonna be, get (laughs) he's not gonna be fighting, cuz no one's gonna be sure if he can hit back, although he can't... So, he's not gonna get that type of bullying but he'll get the other types of bullying because he's not gonna notice where he's going, he's gonna be in Evan mode, and, um, so I was worried about that".

Danielle's reflection on why her son attended the GT Academy was more than an academic reason. She came to the realization her son needed to be in an environment where her son could be himself and the academic were a by-product of a safe and nurturing environment. Danielle recalled a conversation she had with a friend. "And then, the friend that I had here, her son ended up coming back, actually joining GT Academy in seventh grade. So he's a couple years ahead of Ethan, so they actually, he attended one year with Evan. And, um, so, but one of the things he says was like 'Oh, wow, it's the GT Academy' there are a lot of kids like Ethan". Danielle elaborated on what she meant by "kids like Ethan." She said, "there is a very fine line between kids who have Asperger's Syndrome and gifted kids, you know, the weirdness". Danielle shares that her son was twice-exceptional. She said that she was not concerned about her son being accepted by the other GT Academy students. Rather, her concern dealt with her son's twice-exceptionality and how his non-GT Academy peers will perceive his exceptionality. However, she felt it was important for her son to have the academic opportunity to attend the GT Academy.

Tammy, Kevin's mother, also shared, "It seems like all the kids, seem to get along really well because they're all, you know, different and they can all, kind of, come together. So I would say social is pretty good because then he kids to know all kinds of different types of people and it is good for him to learn. You know, it's the world and you're gonna have to deal with different kinds of people all the time." Tammy's reflection on her son's experience reinforced the concept of social comparison and "fitting in" with his gifted and non-gifted peers (Marsh, 1984).

Given the positive academic attributes of the GT Academy, perceptions of the environment are just as important as providing and promoting an engaging and accepting school environment for students (Wang & Eccles, 2013). The positive experiences that the students' and their parents experienced while attending the GT Academy is consistent with Bandura's social cognitive theory. The importance of having positive relationships with peers, and in this case, with teachers, students felt the environment contributed to their positive experiences and reason for attending the GT Academy (Siegle, Rubenstein & Mitchell, 2014). When making their decisions to attend the GT Academy, both students and parents considered the environment of the GT Academy and the level of support they would receive as highly important.

Knowledgeable Teachers

Students' perceptions of school and their teachers have an impact on not only their academic attitudes and behaviors, but also their non-academic attitude and behaviors (Siegle, Rubenstein & Mitchell, 2014). Students in the current study found teachers to be inspiring when they fostered meaningful relationships with their students. Students' perceptions of teachers were positive when their teachers demonstrated that they cared about their students, knew them personally, and were interested in helping them succeed. Ethan described the relationship this way: "She knew all of us. She knew how we learned, what we were interested in, and she knew how to motivate us." This type of differentiation and personalization not only inspired students to do well in the classroom, but it also helped students in the GT Academy feel that they belonged in the GT Academy and part of the entire school.

In addition to the personalization GT Academy teachers demonstrated, the GT Academy students also wanted to be assured that the teacher teaching them was knowledgeable. If the student did not believe that the teacher knew more than they did, it had a negative effect on wanting to do well in that class (Siegle, Rubenstein & Mitchell, 2014). Sarah described her situation:

I knew that the class was not going to be great like my other classes. The teacher wasn't very knowledgeable. There were times she didn't know the answers to our questions, or graded our quizzes and tests wrong. She would assign us workbook pages to do and boring activities to do out of the textbook. I knew I would not be ready to take Biology in eighth grade.

Several students in the current study realized that a teacher's poor content knowledge limited the teacher's ability to provide choice for students or to use different instructional strategies to differentiate the learning experience for their students. Ethan shared, "I struggled in some of my classes. The teachers did not give me any choice with completing projects." Ethan's frustration with lack of choice contributed to his desire to put forth his best effort in this particular class. This frustration was seen by his mother and she voiced this concern with Ethan's teacher. Despite this frustration in his first year at the GT Academy and the lack of choice in products for projects, Ethan felt he made the right decision to attend the GT Academy. For some of the students in the present study, having a teacher who is able to answer their questions and meet their needs academically was important to them. It is not only important for teachers to have expertise in the subject area they teach, but it is also important for them to have an

understanding how to meet the needs of gifted students (Siegle, Rubenstein & Mitchell, 2014).

Many of the students in the current study mentioned how they appreciated teachers who were able to see how the subject connected to student interests or current events. Sarah stated, “from the very beginning of school in science we were always talking about current topics in science. We would have discussions about many different things and it may have seemed off topic, but in the end it was fun and everything made sense.” Elise shared, “Algebra I is so amazing. Our teacher always challenges us with problems that make us think and give us real life examples of what we are studying.”

From classroom observations, student findings were confirmed. There were teachers who struggled with either being able to answer specific student questions, or student engagement was varied. Student engagement varied in that some students completed the assigned task before other students were finished and found other things to do to pass the time. Some students in the present study exhibited little or no interest in participating in activities, or appeared to not be interested in the activities at all. This disengagement was found in the classrooms where the students in the study expressed that the teacher could not answer their questions, or did not make the content interesting to them. Although the classroom observations were not representative of every classroom within the GT Academy, the findings confirmed the importance of content knowledge and making real world connections to the content for students. Connections like this require teachers to be a flexible thinker with an understanding of his/her content. Siegle, Rubenstein and Mitchell (2014) found knowledgeable teachers have

clear mastery of the content they teach and appreciate the interdisciplinary relationship between content in different areas. These teachers build students' self-efficacy and students trust that the classroom environment is one where they can learn and be successful.

As students and parents in the current study reflected upon their decision to attend the GT Academy it became evident that both parent and student perceptions of the environment weighed heavily in their decision making. Given the findings from the interviews and classroom observations, how students perceived their environment and how much support they received from the teacher made lasting impressions on their decisions to attend and remain in the GT Academy. This is similar to the findings of Siegle et al (2014).

Task Value

The second theme used to analyze the interview data was task value. Beyond perceiving an effective and supportive environment, it is also important that the student and the parent perceive a given task as valuable and worthwhile (Siegle, Rubenstein & Mitchell, 2014). When parents and students choose a certain environment, the environment influences our behavior and the way we think (Bandura, 1986). Therefore, the parents' and the students' personal experiences influenced their decision to attend the GT Academy as opposed to attending the middle school they were zoned to attend.

The responses categorized into this theme included responses describing challenging content, meaningful content and grades (Siegle, Rubenstein & Mitchell,

2014). Parents viewed the GT Academy as a vehicle to future success, while students viewed the GT Academy as an opportunity to be challenged academically.

High Challenge Level

In the data collected for this study, both students and parents expressed that challenging content was one of the main reasons they chose to attend the GT Academy. Specialized academic opportunities for gifted middle school students where they are allowed to work together through ability grouping was one of the many reasons why the GT Academy was created. When students felt interested in what they were learning, then it is more likely they would achieve academically and develop a positive self-concept (Clark, 2002). Therefore, for the content to be relevant and exciting for gifted students, it must challenge them in some way (Siegle, Rubenstein & Mitchell, 2014). Students expressed they wanted to be challenged by teachers who presented them with complex ideas. Ethan described his experience as this:

I'm motivated by the things I didn't think I knew, but I actually did. In Algebra, my teacher gives us really challenging problems that I have to really think about and not just solve for x. When the problem makes me think, I really like it. I look forward to going to Algebra. I know when I go to Algebra I'm going to learn something new and not just work a bunch of problems from the book, that's boring and not fun at all.

For Ethan, being presented with a challenging task, he found value in what he was being asked to do; therefore, Ethan felt the task was worth completing. It's this

Parents in the current study expressed a want and a need for their child(ren) to be challenged academically in middle school. These parents found this academic challenge at the GT Academy. Stephanie, Sarah's mother shared:

At the GT Academy, they do projects all the time. I mean, she's constantly thinking, she's constantly trying to create things, or, every thing's project-based. So we see a true difference between being in a GT school class and a regular middle school. Plus you have the field trips; the field experiences. She's involved in a lot of things that, that keep her, you know, active, academically.

Stephanie's experience with her daughter's academic challenge has been positive. She noticed that when her daughter was faced with difficult or challenging situations her daughter put forth more effort toward the assignment/task or class.

Danielle, Ethan's mother, stated that she was excited to have her son participate in the GT Academy because of the academic challenge advertised by the school administration. She mentioned, "I'm confident Ethan will be challenged academically. I know this because he had a great academic experience in GT at the elementary school, so the GT Academy should be the same or even better." Danielle's experience with gifted education was solely based on what she experienced with both of her children. She said, "I never questioned how my son got GT Services. He seemed happy and was learning, so I thought all was okay." For Danielle, it was not until Ethan had the opportunity to attend the GT Academy did she question or thinking about the quality of education her son was receiving. Danielle shared, "this was the first time I had to make sure Ethan was getting his work done. His grades weren't terrible, but they were stellar

either.” Danielle was concerned that Ethan was either not being challenged, or the classes were too difficult. What Danielle found out after meeting with Ethan’s teachers was that Ethan needed to learn how to study. Ethan’s teachers shared with Danielle that her son was capable of doing the work, but now that Ethan is being challenged, he needs to learn how to organize himself to be prepared for the next day. This revelation was not a total surprise to Danielle, but she was appreciative of the feedback and support she received from Ethan’s teachers. Danielle shared that she asked more questions of Ethan’s teachers to determine if Ethan was, or was not interested in the work he was being asked to complete and told the teachers that Ethan’s performance in class would change. Danielle not only wanted Ethan to be challenged academically, but she also wanted Ethan to learn how to manage academic challenges as we progressed through school. Ethan’s experience with high academic challenge and being able to show progress is what Rogers (2007) found in her meta-analysis regarding academic challenge and achievement as it relates to underachievement, academic self-esteem and social and behavioral challenges.

Obtaining the best education for their gifted children was always at the forefront in all discussion with parent participants in the study. Charles expressed a need for academic challenge for his daughter.

I want my daughter to have the very best education no matter what. She is very smart and I want her to be pushed to do her best and be with other students who are like her. If she is not challenged, then she will not be the very best she can.

For me it was not about my daughter's friends and where they were going to school, it was about what I know is best for her and her future.

Charles's confidence in knowing what he felt was best for his daughter led to his decision to have his daughter attend the GT Academy. His decision to have his daughter to attend the GT Academy was based on what he had been told about the academic opportunities and the academic challenge for his daughter, not solely based how his daughter felt about attending the GT Academy. The academic challenge Charles sought for his daughter also emerged from discussion with the other participants in the study. This challenge that matched the students' intellectual ability attributed to the positive self-concept of students and academic success in the GT Academy (Bandura, 1986).

Other students in the present study discussed the depth of the content taught in their classes. They shared that the desired content that they could explore in depth. Kevin shared, "I love Texas History. My teacher gives us more than the facts about the events that took place. We get to discuss why things happened and talk about all the different sides of the events." The opportunity for Kevin and his classmates to discuss the content of Texas History to the depth he described fosters the concept of challenging content via valuing a task to create an effective and supportive environment (Siegle, Rubenstein & Mitchell, 2014). This example of a teacher with extensive knowledge of his/her content and an understanding of providing depth and complexity within the content fosters student motivation (Siegle, Rubenstein & Mitchell, 2014). On the other hand, students in the present study also indicated the opposite. Toni shared, "I feel she only knows enough to teach a lower level math. She wasn't able to go deeper

on some topics. I could have learned all of it on my own.” Teachers with limited content knowledge of the subject are not able to provide the depth gifted students in the GT Academy desired and in some cases, left students with a negative perception of the GT Academy (Siegle, Rubenstein & Mitchell, 2014).

In addition to depth, the GT Academy students in the study enjoyed classes that moved at a faster pace. They wanted challenge, and if the class did not move fast enough for them, some of them did not care for the class. Ophelia stated, “at the beginning of the year, my math class moved very quickly, but after the Christmas break, we moved so slow; it was taking forever to get through stuff.” Ophelia, like other GT Academy students recognized that this teacher adjusted her instructional pace to accommodate students who were struggling with the content. Kevin stated, “I think that certain students suffer because the teachers will have to stay on one topic longer...so they go over and over the same material and it makes it boring of the rest of us.” Ophelia’s and Kevin’s experience with pace in their math class contributed, in part, to their negative experience at the GT Academy. Fortunately, this one negative experience did not cause them to leave the GT Academy. Students’ expressed that the pace of a class, or what was being presented contributed to their positive experience in the GT Academy. If a teacher did not present content at a pace that was commensurate with their intellectual ability, then the students’ experience at the GT Academy was reported as negative, especially for that particular class (Rogers, 2007).

Meaningful Content

Meaningful content was another subtheme identified by Siegle, Rubenstein and Mitchell (2014). Both student and parent participants expressed how course content was meaningful to them for a variety of reasons; while some noted the importance of interdisciplinary connections, others mentioned the value of using course content that is relevant to the world and their personal lives. Parents were impressed by the teachers' ability to weave interdisciplinary themes into their lessons by showing how different concepts were related. Anne, a parent, explained, "...connections across the subject areas, like connecting English to social studies and science...was not only interesting, but also exciting." The instructional practice of making interdisciplinary connections between and among all of the subjects was a draw for Ann and many other parents. Both students and teacher mentioned that in most classes there was very little practice and review. When practice and review was the focal point in a class, especially with math or science, students reported that they became disinterested in the class. Using inquiry and problem-based strategies as a mode of instruction as opposed to review and practice, a deeper understanding of the content can be obtained (Rogers, 2007). Teachers making the content personally interesting to their student contributed to the academic challenge gifted students desire (Siegle, Rubenstein & Mitchell, 2014).

In addition to the interdisciplinary connections, content significance further enhanced the academic challenge for these students (Siegle, Rubenstein & Mitchell, 2014). Significance was added by teachers through the development of personal connections. For example, Sarah noted, "In science we were always reading articles

about current issues which made us care about what we were learning.” By making the content relevant students were able to find meaning in the content, find value and therefore, have a desire to learn the content. The inclusion of current events with societal relevance was also noted by students as making a difference in their classes. Kevin shared, “Whenever we studied different cultures in social studies, our teacher presented a problem for us to solve...making us think about our beliefs and different ways to look at a problem.” For Kevin to be able to find interest in the content being presented to him in a meaningful and significant way contributed to his value of the course and desire to want to be in the GT Academy.

For both parents and students, interdisciplinary connections, relevance, and personal connections were components of the GT Academy that continued their interest in the GT Academy. Students felt a connection to the environment in a way that they had not in the past.

Grades

The subtheme of grades was also identified by Seigle, Rubenstein and Mitchell (2014). Grades for gifted students in the current study were not important to them; however, the parents in the current study thought grades were important. When the content was not challenging or meaningful, students were motivated by grades. Ethan voiced, “In Algebra, we do a lot every day. You are always worrying about what was going to be on the next quiz or test.” Ophelia shared, “I’m always focused on getting A’s in Algebra. If I’m not focused my grade will drop and my parents will not be happy.” Both Ethan and Ophelia were not concerned about a personal connection to the

content, or a connection to society; they were concerned about learning the content in order to do well in the class and move on to the next level of math.

For parents in the current study, many felt grades were important. Stephanie, Sarah's mother, shared, "Grades are very important. I'm glad she has the opportunity to have great projects to so and have really cool discussion, but at the end of the day, she needs to make good grades." Danielle, Ethan's mother, similarly shared, "For Ethan connections with the teacher are important. I want Ethan to learn the content and make good grades. If he finds it interesting, great; if not, he better get good grades." Parents' desire for their children to do well in their classes was not uncommon. They wanted their children to put effort into their work and the byproduct of their effort would be the grade.

For some students in the current study, they often did just enough to bet by or get the A:

There were times when I was not motivated to do all of the work...I would just do enough to get by...right before the marking period ended, I would calculate what I needed to get the graded I needed.

Three students in the current study mentioned they did this "minimum work to get an A." These students noted that this was not in all of their classes, just one class in particular. They noted the teacher's level of expectation of how much work would be necessary for an A. Toni shared:

After the first couple of weeks in class you could figure out how much work you needed to do to get an A. The homework was busy work. You didn't have put

much thought into the homework because she never graded it. The tests were easy too.

These students did say that we their teacher did share her expectation for a project, they would put more effort into their work in order to do well. Elise noted:

There were a few of us who would always get the lowest possible A, but when we had to do more to get the lowest A we did more work...by the end of the year, I felt I was doing more work and putting more effort into my homework, projects and studying for tests. I was getting higher A's on my work too.

High expectations forced students to perform at a higher level. This finding highlights the importance of grades for some students in the GT Academy. Eccles and Wigfield (1995) suggested that students value tasks for a variety of reasons. Grades might hold task value in that they provide future academic opportunities. However, for some students, grades may not be important, so task value could be added through more challenging or meaningful content (Siegle, Rubenstein & Mitchell, 2014).

Self-Efficacy

The third theme in the in the current study used to categorize the data was self-efficacy. Bandura (1977) first developed the term self-efficacy to describe the level to which students believed that they could accomplish a task. Students' self-efficacy contributes to academic achievement as well as to their level of persistence (Robbins et al., 2004; Zientek & Thompson, 2010).

Students and parents in this study shared their expectations of the GT Academy and whether those expectations were met, in addition to academic performance while

attending and participating in the GT Academy. Students reflected on their academic performance, their expectations of the GT Academy. In this study, students valued the opportunity to develop self-efficacy. This self-efficacy was refined through their recognition of personal growth and satisfaction as well as their development of skills through hard work. A subtheme that emerged was personal growth and satisfaction.

Personal Growth and Satisfaction

Students in the current study could see beyond grades to other benefits that were important to them. Students with poor self-efficacy are more likely to doubt their abilities and avoid engaging in tasks that they consider beyond their skill level (McCoach & Siegle, 2003a). With teacher support, guidance and empowerment, both Kevin and Ophelia were able to engage in tasks and accomplish those tasks with success. Kevin explained, “I was doing okay in my English class...my grades were bad, but they could be better. My teacher took time to help me all the time...she made me feel like I could do better.” Like Kevin, Ophelia expressed how her teachers helped, “I felt overwhelmed with all of the work; I felt like I wasn’t smart enough to keep up. My teacher took time to help me not feel that way and I was able to keep up and not feel bad about myself.” Both Kevin and Ophelia believed that their teachers empowered them. These teachers instilled a sense of pride in doing quality work and increased Kevin’s and Ophelia’s confidence in their ability by helping them become competent in the subject content.

Parents also believed that the teachers empowered their children. Tammy, Kevin’s mother, stated;

There was a time when Kevin felt he could not do well in English. I saw a huge change in Kevin once he had a tutorial. He would do better every time we went...writing improved, grades got better; he gained confidence. I truly believe the relationship the teacher developed with Kevin made a difference. A difference I am thankful for and will always cherish.

Tammy's experience highlights an earlier finding related to environmental perceptions. For Tammy and her son, the environment was supportive; therefore, their experience in the GT Academy was positive which led to Kevin's personal growth and satisfaction as a student in the GT Academy.

In addition to personal growth, students experienced personal satisfaction. When teachers present material at a high level, make the content relevant to students, students take more pride in their work and feel a sense of accomplishment (Siegle, Rubenstein & Mitchell, 2014). Students experienced personal satisfaction when teachers help them make real-world connections to the content being studied. Students found the interdisciplinary connections between and among different areas to be more "real-world." Elise stated,

I remember the first connection between social studies, Spanish and English. It was so cool and exciting. It was so cool because I was able to connect the culture of one country to its language and stories...I was seeing how they all worked together in the world, and I wasn't just memorizing vocabulary for a test.

Elise's experience with interdisciplinary content connections highlights her personal satisfaction not only with her classes, but also her personal satisfaction with the

GT Academy. Her connectedness with the classes, her teachers, and the environment have contributed to her self-efficacy.

Summary

Throughout this study, students and parents expressed efficacy factors falling into one of three categories: (a) environmental perceptions, (b) task valuation, and (c) self-efficacy (Siegle, McCoach and Roberts, 2013). The students and the parents in the study were asked to share their personal experiences of deciding to attend the GT Academy and their experiences while attending the GT Academy and the impact on the students' non-academic self-efficacy. By analyzing the factors in each of the three categories as described in the efficacy theory, findings were interpreted to understand how these factors impacted the non-academic self-efficacy of gifted sixth through eighth graders in a specialized setting.

The results of the study coincide with the Achievement Orientation Model (Siegle, McCoach and Roberts, 2013). Students engaged in learning when they saw the material they were learning as meaningful and challenging (task value), and they believed that their teachers were knowledgeable and sincerely interested in them and their learning (environmental perceptions). These gifted students also gained confidence and satisfaction in their work when they developed useful academic skills and grew personally (self-efficacy). Through reflection of their experiences, parents were able to recognize and affirm confidence in their children through participation in the GT Academy.

The understanding of how creating a positive environment is important when implementing or creating a grouping option for gifted students can be managed through professional learning. Gaining a sense of understanding the socio-emotional needs of gifted students can help teachers know their students and show a genuine interest in their students (Siegle, McCoach and Roberts, 2013). Because efficacy is related to the beliefs students have regarding themselves and their success (Bandura, 1986), creating a positive environment via understanding gifted students as a part of professional learning is important. Many of the students in the study did not feel the GT Academy had a positive environment either before attending or during their first year at the GT Academy. This perception changed after year two at the GT Academy. For parents in the study, they too, expressed the same sentiment. For some of the parents in the study were hesitant to send their children to the GT Academy because of what they heard about the environment. Although those parents were hesitant to send their children to the GT Academy, they ultimately did send their children because they felt the GT Academy would provide their children with the best academic opportunity. After the second year of their children attending the GT Academy, they shared that they felt comfortable that they made the right decision to send their children to the GT Academy, and if they were faced with the same choice again, they would have made the same choice.

Administrators at the GT Academy providing opportunities for students and parents to visit during the school day prior to attending the GT Academy and reassuring them of the level of support they would receive, would have provided both students and

parents with a different perception of the environment of the GT Academy. Additionally, professional learning for all staff members at the GT Academy to change their beliefs about gifted students and the special setting being created would have help with environmental perceptions held by both students and parents.

Creating a change in beliefs often occurs after implementation and teachers have some sense of understanding or success (Guskey, 1986). Guskey suggest small, incremental changes can be used initially to build an understanding of desired beliefs. Administrators at the GT Academy started small by having teachers attend one professional learning session at the beginning of the school year and to attend a GT Academy informational meeting in the spring semester. Teachers attended the session at the beginning of the school year, however, participation at the informational meeting was not well attended. GT Academy Administrators can help move teachers forward by highlighting successful understanding and implementation of professional learning (Guskey, 1986). Ensuring teachers have an understanding of the socio-emotional needs of gifted students and how to create a positive environment for them would assist with increasing student efficacy and improving parent perceptions of the GT Academy.

Beyond perceiving an effective and supportive environment, it was also important that students in the GT Academy perceived a given task as valuable and worth their time (Rubenstein, Siegle, Reis, McCoach & Burton, 2012). Both students and parents had mixed experiences when they discussed their academic expectations and experiences in the classroom. Most of the students expressed that they were challenged academically. For many of them this was the first time they had to either study for tests

or were in a class with other students who know just as much or even more than they did. However, there were instances where the same students expressed that they were not motivated to do more than the minimum required in a given class. For these students, the disconnect between the lack of academic challenge and the teacher making the content relevant made these students question the value of attending the GT Academy. Parents, however, found the level of academic challenge for their students appropriate. All of the parents in the study want a high level of academic challenge for their children and felt the GT Academy would and offered the challenge they sought for their children. Parents in the study emphasized grades as important to them. When asked how they perceived their child's level of motivation and value of the academics at the GT Academy, all but one parent felt their child was not motivated or was not being challenged academically. This parent felt some of the teachers either had limited knowledge of how to teach gifted students, or did not understand how to connect with gifted children.

Bandura (1986) first developed the term self-efficacy to describe the level to which students believed that they could accomplish a task. In the study, students valued classes in which they developed self-efficacy. This self-efficacy was cultivated through their recognition of personal growth and satisfaction as well as their development of skills and the production of quality work. Non-academic self-efficacy was cultivated through opportunities to set goals for themselves that were both academic and non-academic, and opportunities develop other talents and skills beyond the classroom. Students in the study shared that some teachers provided opportunities for them set goals

for themselves and time for them to evaluate their performance in relation to the goals the set. Students also had opportunities to learn time management and study skills. When asked about personal goals they set for themselves, all students shared that their comfort level of completing tasks or continuing in the GT Academy depended on whether they felt they could do well in their classes, or if they felt like they “fit in”. They all expressed that over a period of a year or two that their comfort level did increase. They shared that it was in part due to the content learned in classes as personally interesting and useful, as well as, feel connected to a community where they felt valued. All of the parents felt that the GT Academy provided opportunities for their children to have positive perceptions of themselves. Parents shared that they saw changes in their children after attending the GT Academy after one year. When asked what those changes were, the parents shared that their children were now studying and were becoming better managers of their time.

The results of this study show positive aspects of a special setting for a set of gifted students, as well as, some areas of improvement at the GT Academy. Overall, the experiences shared by both students and parents is positive; however, there are areas where teachers and administrators can improve. Student perceptions of the GT Academy and their experiences within the GT Academy were mixed. Parents’ perception and experiences were similar to their children’s experiences.

Administrators at the GT Academy have done a commendable job in ensuring student success at the GT Academy. The few instances of lack of teacher connection with students and parents’ negative perceptions of the GT Academy prior to having their

child attend the GT Academy can be addressed. Professional learning for GT Academy teachers and teachers of the non-GT Academy has been non-specific and generic. This has not allowed all teachers to have a better understanding of the socio-emotional characteristics and needs of gifted students, or for the GT Academy teachers to hone and develop their instructional practices to meet the specific academic needs of students attending the GT Academy.

CHAPTER V

CONCLUSIONS

In the previous chapter, the results of the current study were presented and analyzed to give an overall picture of the non-academic self-efficacy of gifted middle school students in the study. This chapter will synthesize the results of the study and provide recommendations for practice. Additionally, limitations of the study will be shared as well as recommendations for future study.

Summary of Findings

The purpose of this study was to examine and analyze the impact of non-academic self-efficacy students has on gifted middle school students in a school-within-a-school setting. In order to provide the findings on non-academic self-efficacy within a larger context of the school-within-a-school setting the findings were categorized into a priori themes surrounding the personal, behavioral and environmental factors of student non-academic self-efficacy (Bandura, 1986) and further categorized into categories that emerged related to the Achievement Orientation Model (Seigle, McCoach and Roberts, 2017).

The GT Academy has been in existence for eleven years. Students in the GT Academy are selected through an application process to attend and participate in the GT Academy. The initial proposal of implementing the GT Academy was not well received by a majority the community. Members of the community alluded to the elitist atmosphere that would be created with the implementation of the GT Academy (Sapon-

Shevin, 1994). This perception of elitism impacted initial interest in attending the GT Academy. Initial community meetings focused on the experiences gifted students would have by attending the GT Academy that they would not have if they were to attend their zoned middle school. This approach hampered initial interest and participation. During the initial community meetings interest would have been greater if district-level administrators and the school administrator had opportunities to share the positive academic benefits the ability grouping strategy being used at the GT Academy (Kulik & Kulik, 1992).

Participation in the GT Academy grew after the initial year due to the equity and access to experiences which fostered academic growth and support. Teachers utilized differentiation strategies within the GT Academy classrooms to meet the academic needs of the GT Academy students. This was a typical finding from the research as differentiation is an excellent way to meet the needs of all learners (Clark, 2002). Although GT Academy teachers had access to instructional strategies to differentiate for the GT Academy students, they were rarely used. Initially teachers were hesitant to teach conceptually and to develop cross-curricular units of study. Providing initial professional learning opportunities in developing cross-curricular units of study around conceptual ideas/themes that are differentiated to meet the various abilities within the GT Academy classroom would have helped teachers in building the non-academic self-efficacy of the GT Academy students. Teachers spent some time creating varied learning experiences but creating and implementing activities to include opportunities for the GT Academy students to understand who they are and to build their confidence when

learning new and challenging material would help students with their self-concept (Bandura, 1997).

Recommendations for Practice

The research questions for this study related to the feelings of efficacy gifted students and their parents have towards attending a school-within-a-school specifically designed for gifted students in grades six through eight and determining if this method of grouping gifted and talented students supports student self-efficacy and increases teacher's understanding of the social and emotional needs of gifted students as it relates to utilizing instructional best practices for meaningful instruction. The findings highlighted a need to increase certain aspects of professional learning, resources, and time for mastery experiences so teachers could increase their understanding of gifted students in a school-within-a-school setting specifically designed for gifted students.

The professional development offered to the teachers in the present study was primarily subject specific and centered around the scope and sequences of content standards. While this training was necessary at the beginning of the implementation of the GT Academy for teacher to understand the content curriculum, it did little to help teachers understand the social and emotional needs of gifted students and how to meet the various cognitive needs of the gifted students in the GT Academy. In order for training to be more effective in increasing students' non-academic self-efficacy, the training should be specific to the social and emotional needs of gifted students (Wright, 1997). On-going job-embedded professional learning is helpful for teachers who are providing services for gifted student, particularly in this specific setting. The teachers in

the study received foundational training as required by the state but were not knowledgeable of specific characteristics of gifted students related to grouping of gifted students for a specific purpose. By ensuring training and coaching is implemented by district and campus staff knowledgeable in the social and emotional needs of gifted students, this would help teachers have a better understanding of gifted students and be able to create authentic learning experiences for gifted students (Wright, 1997).

Administrators could explore the implementation of Type III Enrichment activities in Renzulli's (1977) Enrichment Triad Model. Type III Enrichment activities have a focus on personalization of interest, the use of authentic investigative and creative methodology, problems without predetermined correct answers, and development of a product that will have an impact on one or more intended audiences (Renzulli & Reis, 1985, 1997, 2014). Curriculum for the gifted must contain accelerated academic work; however, the social and emotional needs of gifted students must be addressed. Teachers must include activities to enhance the affective development of the gifted that must be integrated along with the subject matter activities (Elmore & Zenus, 1994).

Recommendations for Future Research

The purpose of the present study was to build upon prior research on the non-academic self-efficacy of gifted students, specifically gifted students in a school-within-a school setting. This study expanded the research by focusing on a subset of students and their parents and analyzing non-academic self-efficacy within a particular context, a GT Academy, which limited the scope of research. This research provides insight into how homogeneous and heterogeneous grouping practices influence student self-efficacy and

self-concept. This insight coincides with the review of the literature related to the grouping practices of gifted students. The research also provides insight into how teachers within a school-within-a-school setting interact and provide instruction for these gifted students in a specialized grouping arrangement. The focus of this interaction was the examination of the implementation of differentiated curriculum and instruction to meet the intellectual needs of these gifted students in the classroom, as well as, the level of support students received from teachers. The results of this study can be used to evaluate the efficacy of current school-within-a-school programs for gifted students. Additionally, the result of this study could provide district and campus administrators with insight into the implementation of grouping strategies for gifted students, as well as, teacher training about the instructional and social/emotional strategies to be used with gifted students. There are area of future research that could be expanded from the present study.

First, how does the school environment with a school-within-a school setting for gifted students impact the choice of both students and the parents of those students who choose to attend the school-within-a-school and those students zoned to attend that school. School environment should be carefully examined. Acceleration, curricular experiences may affect students' motivation, and connection to the GT Academy. Additionally, school environment might not be the only contributing factor to students wanting to attend the GT Academy or to continue their schooling at the GT Academy. Culture and socioeconomic status might also be factors. Several effective programs

have been designed to promote achievement among diverse learners, such as Whiting and Ford's Scholar Identity Program (Whiting, 2009).

Second, what impact does professional learning on the specific social-emotional and academic needs of gifted students have on the self-concept and self-efficacy of gifted students? The students and parents in the present study were concerned with "fitting in" and getting the best education possible. Providing specific social-emotional training and subject-specific training related to enhancing the affective development of the gifted integrated into the subject matter should positively impact students' experiences in a school-within-a-school setting specifically designed for gifted students (Elmore & Zenus, 1994). Further research could analyze specific instructional and affective strategies to understand if training on the use of specific strategies impact student non-academic self-efficacy. Specific training on the use of the strategies for each content area could be analyzed, along with job embedded professional learning, to understand how those practices influence self-concept. Further research could analyze the implementation of Type II Enrichment activities in Renzulli's (1977) Enrichment Triad Model and the relationship to task value and non-academic self-efficacy.

Conclusion

The purpose of this study was to analyze the non-academic self-concept of homogeneously grouped sixth and eighth grade gifted students. Through a case study approach, findings were shared relating how students' and parent perceptions of their child's self-concept impacted their decision to attend the GT Academy and experiences during their participation the GT Academy. Students in the present study reported

positive experiences within the GT Academy and parents in the present study also reported positive experiences. Further research should focus on the benefits from teacher professional learning with an emphasis on socio-emotional characteristics of gifted students.

REFERENCES

- Adams-Byers, J., Whitsell, S. S., & Moon, S. M. (2004). Gifted students' perceptions of the academic and social/emotional effects of homogeneous and heterogeneous grouping. *Gifted Child Quarterly*, 48(7), 7-20.
- Allan, S. (1991). Ability grouping research reviews: What do they say about grouping and the gifted? *Educational Leadership*, 48(6), 60-65.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognition theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.) *Encyclopedia of human behavior*, (R-Z index) (pp. 71-81). San Diego, CA: Academic Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Banfield, T. (2005). Ability grouping for mathematically gifted adolescent boys. *International Education Journal*, 6(2), 141-149.
- Barns, R. & Mason, D. (2002). Class composition and student achievement in elementary schools. *American Education Research Journal*, 39(1), 201-233.
- Boyatzis, R. E. (1998). *Transforming qualitative information*. Thousand Oaks, CA: Sage Publications.
- Borland, J.H. (2003). Evaluating gifted programs: A broader perspective. In N. Colangelo & G. A. Davis (eds.) *Handbook of gifted education* (3rd ed. Pp. 291-310). Boston: Allyn & Bacon.

- Brigandi, C. B., Siegle, D., Weiner, J., Gubbins, E. J., & Little, C. (2016). Gifted secondary school students: The perceived relationship between enrichment and goal valuation. *Journal for the Education of the Gifted*, 39, 263-287.
Doi:10.1177/0162353216671837
- Brody, L. E. & Benbow, C. P. (1986). Social and emotional adjustments of adolescents extremely talented in verbal or mathematical reasoning. *Journal of Youth and Adolescence*. 8.
- Clark, B. (1997). *Growing up gifted*. Columbus, OH: Merrill.
- Clark, B. (2002). *Growing up gifted: Developing the potential of children at home and at school*. Upper Saddle River, N.J: Merrill/Prentice Hall.
- Clinkenbeard, P. R. (2012). Motivation and gifted students: Implications of theory and research. *Psychology in the Schools*, 49 (7) 622- 630.
- Coleman, M. R., & Gallagher, J. J. (1995). The successful blending of gifted education with middle schools and cooperative learning: Two studies. *Journal for the Education of the Gifted*, 18, 362-384.
- Cox, J., Daniel, N., & Boston, B. O. (1985). *Educating able learners: Programs and promising practices*. Austin, TX: University of Texas Press.
- Creswell, J W. (2007). *Qualitative inquiry and research design*, (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Cross, T. L. & Swiatek, M. (2009). Social coping among academically gifted adolescents in a residential setting: A longitudinal study. *Gifted Child Quarterly*, 53, 25-53. Doi: 10.1177/0016986210397831

- Denzin, N. & Lincoln, Y. (1998). *The landscape of qualitative research: Theories and issues*, Thousand Oaks, CA: Sage Publications.
- Deweese, S. (1999). School-within-a-school model (ERIC Digest). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED438147).
- Eccles, J. S., & Wigfield, A. (1995). In the mid of the actor: The structure of adolescents' achievement task values and expectancy-related beliefs. *Personality and Social Psychology Bulletin*, 21, 215-225.
- Elmore, R. F., & Zenus, V. (1994). Enhancing social-emotional development of middle school gifted students. *Roeper Review*, 16(3), 182-185.
doi:10.1080/02783199409553569
- Erlandson, D. A., Harris, E. L., Skipper, B. L. & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*, Newbury Park, CA: Sage Publications.
- Feldhusen, J. P. (1989). Synthesis of research on gifted youth. *Educational Leadership*, 46(6), 6-11.
- Feldhusen, J. F., & Kroll, M. D. (1985). Parent perceptions of gifted children's educational needs. *Roeper Review*, 7, 249-252.
- Festinger, L. (1954). A theory of social comparison process. *Human Relations*, 7, 117-148.
- Fetterman, D. M. (1988). *Excellence and equality*. New York: SUNY.

- Fielder, E. D., Lange, R. E., & Winebrenner, S. (1993). In search of reality: Unraveling the myths about tracking, ability grouping, and the gifted. *Roeper Review*, 16(1), 4-7.
- Ford, D. Y. (2003). Two other wrongs don't make a right: Sacrificing the needs of diverse students does not solve gifted education's unresolved problems. *Journal for the Education of the Gifted*, 26, 283-291.
- Fournier, G. (2016). Self-concept. *Psychology Central*. Retrieved on May 19, 2017, from <https://psychcentral.com/encyclopedia/self-concept>.
- Gallagher, J. J., Weiss, P., Oglesby, K., & Thomas, T. (1983). The status of gifted/talented education: United States surveys of needs, practices, and policies. Ventura County, CA: Ventura County Superintendent of Schools Office.
- Gamoran, A. (1992). Is ability grouping equitable? *Educational Leadership*, 50 (October, 1992) 11-17.
- Gamoran, A. (1992). *The Variable Effects of High School Tracking*. Madison, Wis.: Center on Organization and Restructuring of Schools.
- Gentry, M., Rizza, M., & Owen, S. (2002). Examining perceptions of challenge and choice in classrooms: The relationship between teachers and their students and comparisons between gifted students and other students. *Gifted Child Quarterly*, 46(2), 145-155.
- Goodlad, J. L. (1984). *A place called school: Prospects for the future*. New York: McCraw-Hill.

- Guskey, T. R. (1986). Staff development and the process of teacher change. *Educational Researcher*, 15(5), 5-12.
- Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal*, 31, 627-643.
- Hoge, R. & Renzulli, K. (1993). Self-concept and the gifted child. The National Research Center on the Gifted and the Talented. No. 9104.
- Holloway, J. (2003). Grouping gifted students. *Educational Leadership*, 61, (2), 89-91.
- Howley, C. B. & Bickel, R. (2000). Results of a four-state study: Smaller schools reduce harmful impact of poverty on student achievement. Washington, D. C.: Rural School and Community Trust.
- Huss, J. A. (2006). Gifted education and cooperative learning: A miss or match?. *Gifted Child Today*, 29(4), 19-23.
- Kulik, C.-L. (1985). "Effects of Inter-Class Ability Grouping on Achievement and Self-Esteem." Paper presented at the annual conference of the American Psychological Association (93rd), Los Angeles, CA.
- Kulik, C.-L. C., & Kulik, J.A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. *American Educational Research Journal*, 19(3), 414-428.
- Kulik, J. A. (1992). *An analysis of the research on ability grouping: Historical and contemporary perspectives*. Storrs, CT: National Research Center on the Gifted and Talented.

- Kulik, J. A. & Kulik, C.- L. (1989). Effects on ability grouping on student achievement. *Equity and Excellence*. 23(1), 22-30.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA; Sage.
- McCoach, D. B., & Siegle, D. (2003a). Factors that differentiate underachieving gifted students from high-achieving gifted students. *Gifted Child Quarterly*, 47, 144-154.
- Marsh, H. W., & Craven, R. G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and unidimensional perspectives. *Perspectives on Psychological Science*, 1, 133-163.
- Marsh, H. W., & Parker, N. (1985). Self-concepts: Their relationship to age, sex and academic measures. *American research Journal*, 22(3), 422-444.
- Matthews, D., Kitchen, J. (2007). School-within-a-school gifted programs: Perceptions of students and teachers in public secondary schools. *Gifted Child Quarterly*. 51(3), 256-271.
- Mendaglio, S. & Pyryt, M. (2003). Self-concept and gifted: A multi-theoretical perspective. *Gifted and Talented International*, 18, 2, Northridge. World Council for Gifted and Talented Children.
- Merriam, S. B. (1998). *Qualitative research and case study application in education*. San Francisco: Jossey-Bass Publishers.
- Mesler, N. A. (1999). Gifted students and cooperative learning: A study of grouping strategies. *Roeper Review*, 21(4), 315-321.

- Morgan, H. J., Tennant, C. G., & Gold, M. J. (1980). *Elementary and secondary level programs for the gifted*. New York: Teachers College.
- Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven, CT: Yale University Press.
- Olszewski-Kubilius, P., & Turner, D. (2002). Gender differences among elementary school-aged gifted students in achievement, perceptions of ability, and subject preference. *Journal for the Education of the Gifted*, 25, 233-268.
- Peterson, J. S., & Colangelo, N. (1996). Gifted achievers and under-achievers: A comparison of patterns found in school files. *Journal of Counseling & Development*, 74, 399-407.
- Plucker, J. A., & Stocking, V.B. (2001). Looking outside and inside: Self-concept development of gifted adolescents. *Exceptional Children*, 67(4), 535-548.
- Preckel, F., & Brull, M. (2008). Grouping the gifted and talented: Are gifted girls most likely to suffer the consequences?. *Journal for the Education of the Gifted*, 32(1), 54-85.
- Renzulli, J. S. (1994). *Schools for talent development: A practical plan for total school improvement*. Mansfield, CT: Creative Learning Press.
- Renzulli, J. S. (1977). *The enrichment triad model: A guide for developing defensible programs for the gifted and talented*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S. & Hoge, R. (1993). Exploring the link between giftedness and self-concept. *Review of Educational Research*, 63 (4), 449-465, Winter.

- Renzulli, J. S., & Reis, S. M. (1985). *The schoolwide enrichment model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S., & Reis, S. M. (1997). *The schoolwide enrichment model: A how-to guide for talent development* (2nd ed.). Waco, TX: Prufrock Press.
- Renzulli, J. S., & Reis, S. M. (2014). *The schoolwide enrichment model: A how-to guide for talent development* (3rd ed.). Waco, TX: Prufrock Press.
- Rinn, A. N., Plucker, J. A., & Stocking, V. B. (2010). Fostering gifted students' affective development: A look at the impact of academic self-concept. *Teaching Exceptional Children*, 6(4), 1-13.
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, 130, 261-288.
- Rogers, K. B. (1991). The relationship of grouping practices to the education of the gifted and talented learner. ERIC, Document number ED343330. National Research Center on the Gifted and Talented, Storrs, CT.
- Rogers, K. B. (2002). Grouping the gifted and talented. *Roeper Review*, 23(3), 103-108.
- Rubenstein, L. D., Siegle, D., Reis, S. M., McCoach, D. B., & Burton, M. G. (2012). A complex quest: The development and research of underachievement interventions for gifted students. *Psychology in the Schools*, 49, 678-694. Doi: 10.1002/pits.21620
- Sapon-Shevin, M. (1994). Why gifted students belong in inclusive schools. *Educational*

- Leadership*, 52 (4), 64-70.
- Schunk, D. H. (1996). *Learning theories*. Upper Saddle River, NJ: Prentice-Hall.
- Schunk, D. H. (1987). Peer models and children's behavioral change. *Review of Educational Research*. 57(2), 149-174.
- Seigle, D., & McCoach, D. B. (2005). *Motivating gifted students*. Waco, TX: Prufrock Press.
- Siegle, D., McCoach, D. B., & Roberts, A. (2017). Why I achieve determines whether I achieve. *High Ability Studies*.doi:10.1080/13598139.2017.1302873
- Seigle, D., Rubenstein, L. D., & Mitchell, M. S. (2014). Honors students' perceptions of their high school experience: The influence of teachers. *Gifted Child Quarterly*, 58, 35-50. Doi:10.1177/0016986213513496
- Shields, C. (2002). A comparison study of student attitudes and perceptions in homogeneous and heterogeneous classrooms. *Roeper Review*, 23(3), 115-119.
- Shields, C. (1996). To group or not to group academically talented or gifted students?. *Educational Administration Quarterly*, (2), 32, 295-323.
- Slavin, R. E. (1990). Ability grouping and student achievement in secondary schools: A best-evidence synthesis. *Review of Educational Research*, 60, 471-499.
- Tieso, C. L. (2002). *The effects of grouping and curricular practices on intermediate students' mathematical achievement*. Storrs, CT: National Research Center on the Gifted and Talented.

- Tomlinson, C.A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C. A. (1995). Deciding to differentiate instruction in middle school: One school's journey. *Gifted Child Quarterly*, 39, 77-78.
- Tomlinson, C. A., Coleman, M. R., Allan, S., Udall, S., & Landrum, M. (1986). Interface between gifted education and general education: Toward communication, cooperation, and collaboration. *Gifted Child Quarterly*. 40 (3). 165-171.
- Trépanier, C. (2015). *Educating your gifted child: how one public school teacher embraced homeschooling*. Olympia, WA: GHF Press.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, NY: SUNY Press.
- VanTassel-Baska, J. (1986). Effective curriculum and instruction models for talented students. *Gifted Child Quarterly*. 30(4), 164-169.
- Vogl, K. & Preckel, F. (2014). Full-time ability grouping students: Impacts on social self-concept and school-related attitudes. *Gifted Child Quarterly*, 58 (1) 51-68.
- Wang, M. T., & Eccles, J. S. (2013). School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using multidimensional perspective. *Learning and Instruction*, 28, 12-23.
- Whiting, G. W. (2009). *The scholar identity institute: Guiding Darnel and other black males*: *Gifted Child Quarterly*, 32(4), 53-56.

- Worthy, J. (2010). Only the names have been changed: Ability grouping revisited. *Urban Review: Issues and Ideas in Public Education*, 42(4), 271-295.
- Wright, P. (1997). The self-concept of gifted adolescents in a congregated program. *Gifted Child Quarterly*, 41 (3), 83-94.
- Zeidner, M. & Schleyer, E. J. (1999). Evaluating the effects of full-time vs part-time educational programs for the gifted: Affective outcomes and policy considerations. *Evaluation and Program Planning*, 22, 413-427.
- Zientek, L. R., & Thompson, B. (2010). Using commonality analysis to quantify contributions that self-efficacy and motivational factors make in mathematics performance. *Research in The Schools*, 17, 1-12.
- Zimmerman, B. J. & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology*, 82(1), 51-59.